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The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
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MASSACHUSETTS CONTINGENCY PLAN

Public Hearing Draft

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DRAFT MCP OUTLINE

310 CMR 40.000 Massachusetts Contingency Plan

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SUBPART A GENERAL PROVISIONS

40.001 Authority

These regulations are promulgated by the Commissioner of the Department pursuant to the authority granted by M.G.L. c. 21E §3 and §6.

40.002 Purpose

The purpose of the Massachusetts Contingency Plan (MCP) is to delineate the response action authorities and liabilities created by the Massachusetts Oil and Hazardous Material Release Prevention and Response Act of 1983 and amendments thereto (M.G.L. c. 21E) and the interrelationships between the Department, other governmental agencies, potentially responsible parties and interested members of the public in responding to releases and threats of release of oil and hazardous material to the environment. The process described in these regulations for the notification, assessment and remediation of releases or threats of releases of oil or hazardous materials is to establish procedures for the efficient and consistent response to oil or hazardous material releases across the Commonwealth.

40.003 Applicability

This Contingency Plan applies to response actions taken by potentially responsible parties, other parties, or by the Department pursuant to authorities of M.G.L. c. 21E. Specifically, it addresses the procedures to respond to releases and threats of release of oil or hazardous materials to waters, land, surface or subsurface strata, or ambient air of the Commonwealth which may constitute a significant or otherwise unacceptable risk of harm to health, safety, welfare or to the environment. This Plan is intended to complement the National Contingency Plan under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986.

For response actions in progress as of the effective date of this MCP, those portions of response actions which were approved in writing by the Department prior to promulgation of this MCP shall be completed in a manner consistent with the terms and conditions of the written approval. For other response actions in progress as of the effective date of the MCP, the Department will determine if the specific activities in progress shall be completed as planned. However, any further activities of a response action will be subject to this Contingency Plan.

40.004 Terminology

M.G.L. c. 21E was first enacted in 1983 (Acts of 1983, c. 7). The statute gave the Department authority to respond to releases or threats of releases of

oil or hazardous materials from sites or vessels. The 1986 amendments to M.G.L. c. 21E resulting from passage of Question 4, refers to disposal sites and priority disposal sites. The term, disposal site, is defined in §2 and used in §§3A, 14, and 15 of the statute with cross references to the remainder of the statute where the original terms, site and release, are used. As the definitions and concepts of disposal site, site and release provided in the statute contains provide subtle differences, the Contingency Plan has been worded to minimize these differences while retaining the Department's flexibility to respond or require a response to all releases, sites, and disposal sites. The Contingency Plan assumes that:

- (1) A release or threat of release of oil or hazardous material may constitute a disposal site. A release of an emergency nature is subject to an emergency response action. It is not initially considered a disposal site.
- (2) Every disposal site is also a site, although there may be some sites that are not disposal sites. For example, contaminated areas resulting from emissions from the exhaust of an engine, or the by-products or special nuclear material from a nuclear incident, may be considered sites but not disposal sites.
- (3) Every priority disposal site is also a disposal site;
- (4) The process described in the Contingency Plan applies to releases, sites, and to disposal sites; and
- (5) The term, disposal site, is used generally throughout the Contingency Plan unless the reference is specific to priority disposal sites.

40.005 Provisions

These regulations are intended to provide for efficient, coordinated and effective response to releases or threats of release of oil and hazardous materials. They include:

- (1) a process to ensure protection of public health, safety, welfare and the environment by comprehensively regulating the assessment and remediation of releases of oil and hazardous materials;
- (2) procedures whereby the extent and nature of a release or threat of release of oil or hazardous material can be consistently and appropriately assessed and remediated;
- (3) procedures for the involvement of other parties and potentially responsible parties in the response action process;
- (4) procedures for the involvement of the public in the response action process; and

- (5) procedures for recovery of costs incurred by the Department in responding to releases and threats of release and for damages associated with injury, loss, or destruction of natural resources from potentially responsible parties.

40.006 Effective Date

These regulations shall take effect on _____.

40.007 Computation of Time

Unless otherwise specifically provided by law, the time required to comply with any order issued pursuant to 310 CMR 40.000 shall begin with the first day following the act which initiates the time period, and shall include every business calendar day, including the last day of the time period. If the last day is a Saturday, Sunday, legal holiday, or any other day in which the offices of the Department are closed, the deadline shall run until the end of the next business day.

40.008 Accurate and Timely Submittals to the Department

(1) No person shall make any false, inaccurate, or misleading statements in any application, record, report, plan, or statement which that person submits, or is required to submit, to the Department pursuant to M.G.L. c. 21E, 310 CMR 40.000, or any order issued or determination made by the Department.

(2) Any application, record, report, plan, or statement which any person is required to submit to the Department shall be submitted within the time period prescribed in M.G.L. c. 21E, 310 CMR 40.000, or any order issued or determination made by the Department, unless otherwise specified by the Department.

40.009 Accurate and Complete Record-Keeping

No person shall make any false or misleading statements in any record, report, plan, file, log, or register which that person is required to keep, pursuant to M.G.L. c. 21E or 310 CMR 40.000 or any order issued or determination made by the Department. Any record, report, plan, file, log, or register which any person is required to keep shall be filled out completely and otherwise kept in compliance with M.G.L. c. 21E, 310 CMR 40.000, or any order issued by the Department. Such records shall be made available to the Department in the event that a demand is made for them under the authority of M.G.L. c. 21E §8.

40.010 Monitoring

No person shall falsify, tamper with, alter, destroy, disturb or otherwise interfere with any mechanism, recovery or control system, or any monitoring device or method which any person maintains, or which is required to be maintained pursuant to M.G. L. c. 21E or CMR 40.000 or any order issued and deter-

mination made by the Department. Any monitoring which any person is required to perform shall be promptly, fully and accurately performed and shall otherwise be in compliance with M.G. L. c. 21E, 310 CMR 40.000, or any order issued or determination made by the Department.

40.011 Certification

Any person providing any information required to be submitted to the Department pursuant to M.G.L. c. 21E, 310 CMR 40.000, or any order issued or determination made by the Department shall make the following certification: "I certify that I have personally examined the following and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

40.012 Imminent Threats

If, in issuing an order which may become the subject of an adjudicatory hearing under M.G.L. c. 30A, the Department finds that an imminent threat to public health, welfare, safety, or to the environment exists or could exist prior to the conclusion of the adjudicatory hearing requested thereon, the Department may, pursuant to M.G. L. c. 21E, §9, provide that the order become provisionally effective and enforceable immediately upon issuance, and shall remain so notwithstanding and until the conclusion of any adjudicatory hearing procedures. The issuance of an order shall not prevent the Department from undertaking response actions pursuant to 310 CMR 40.000 and M.G.L. c. 21E during the pendency of any appeal.

40.013 Presumption of Irreparable Harm

Any violation of M.G.L. c. 21E, of 310 CMR 40.000, or of any order issued thereunder, shall be presumed to constitute irreparable harm to the public health, safety, and welfare, and to the environment. Such presumption may be rebutted by the introduction of competent evidence.

40.014 Severability

It is hereby declared that the provisions of 310 CMR 40.000 are severable and if any provision hereof or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions hereof or applications thereof which can be given effect without the invalid provision or application.

(40.015-40.019: Reserved)

40.020 Definitions

"Affected individual", any individual who experiences or may experience significant environmental, health, or economic impacts as a result of a disposal site.

"Applicant group", any group of affected individuals that applies for a technical assistance grant pursuant to these regulations.

"Assess" or "Assessment", such investigations, monitoring, surveys, testing, and other information gathering activities to identify: (1) the existence, source, nature and extent of a release or threat of release of oil or hazardous materials; (2) the extent of danger to the public health, safety, welfare and the environment; and (3) those persons liable under M.G.L. c. 21E §5. The term shall also include, without limitation, studies, services and investigations to plan, manage and direct assessment, containment and removal actions, to determine and recover the costs thereof, and to otherwise accomplish the purposes of Chapter 21E.

"Act of God", an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight. A natural disaster is unanticipated when it is of a type unexpected given the area, the season, and the past history of conditions.

"CERCLA", the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, 42 USC Sec. 9601 et seq.

"Chief municipal officer", the city manager in any city having a city manager or the mayor in any other city; the town manager in any town having a town manager or the board of selectmen in any other town.

"Commissioner", the Commissioner of the Department of Environmental Quality Engineering.

"Community", a city or town of the Commonwealth.

"Contain" or "Containment", actions taken in response to a release or threat of release of oil or hazardous material into the environment to prevent or minimize such release so that it does not migrate or otherwise cause or threaten substantial danger to present or future public health, safety, welfare or the environment. The term shall also include security measures, including, without limitation, the building of fences for the purpose of limiting and restricting access to a site or vessel where there has been a release or there is a threat of a release of oil or hazardous materials.

"Department", the Department of Environmental Quality Engineering.

"Determination", any decision, oral or written, made by the Department in accordance with M.G.L. c. 21E or 310 CMR 40.000 with regard to response actions which is not an order under authority of M.G.L. c. 21E §9.

"Disposal site", any structure, well, pit, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil or hazardous material has come to be located as a result of any spilling, leaking, pouring, abandoning, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding or otherwise disposing of such oil or hazardous material. The term shall not include any site containing only oil or hazardous materials which: are lead-based paint residues emanating from a point of original application of such paint; resulted from emissions from the exhaust of an engine; are building materials still serving their original intended use or emanating from such use; or resulted from release of source, byproduct or special nuclear material from a nuclear incident, as those terms are defined in 42 USC Sec. 2014, if such release was subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under 42 USC Sec. 2210.

"Environment", waters, land, surface or subsurface strata, or ambient air of the Commonwealth.

"Expert", one who has special knowledge or training in a particular field.

"Exposure," any contact, ingestion, inhalation or assimilation of or with oil or hazardous materials, including irradiation.

"Grant", technical assistance grant authorized by M.G.L. c. 21E §14(c).

"Hazardous material", material including, but not limited to, any material, in whatever form, which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed. The term shall not include oil. The term shall also include all those substances which are included under 42 USC Sec. 9601(14) and 310 CMR 30 but it is not limited to those substances.

"Imminent hazard", a hazard which poses a significant or otherwise unacceptable risk of harm to health, safety, public welfare, or the environment if it were present even for a short period of time.

"Location To Be Investigated", (LTBI), a location in the Commonwealth that is considered by the Department as reasonably likely to be a disposal site.

"MCP", the Massachusetts Contingency Plan, or Contingency Plan.

"NCP", the National Contingency Plan promulgated by the U.S. Environmental Protection Agency pursuant to CERCLA.

"NPL", the National Priorities List published by the U.S. Environmental Protection Agency pursuant to CERCLA.

"Oil", insoluble or partially soluble oils of any kind or origin or in any form, including, without limitation, crude or fuel oils, lube oil or sludge, asphalt, insoluble or partially insoluble derivatives of mineral, animal or vegetable oils. The term shall not include waste oil, and shall not include those substances which are included in 42USC Sec. 9601(14).

"Other party", any person, other than a PRP, who may undertake a response action for a release or threat of release.

"Owner" or "Operator", (1) in the case of a vessel, any person owning, operating or chartering by demise such vessel, (2) in the case of a site, any person owning or operating such site, and (3) in the case of an abandoned site, any person who owned, operated, or otherwise controlled activities at such site immediately prior to such abandonment. The term shall not include a person, who, without participating in the management of a vessel or site holds indicia of ownership primarily to protect his security interest in said vessel or site.

"Permanent solution", a measure or combination of measures that, at a minimum, will ensure attainment of a level of control of each identified substance of concern at a disposal site or in the surrounding environment such that no substance of concern will present a significant or otherwise unacceptable risk of damage to health, safety, public welfare, or the environment during any foreseeable period of time.

"Person", any agency or political subdivision of the federal government or the Commonwealth, any state, public or private corporation or authority, individual, trust, firm, joint stock company, partnership, association or other entity, and any officer, employee, or agent of such person, and any group of persons.

"Potentially responsible party" (PRP), is any person or party who has been identified by the Department as potentially liable under M.G.L. c. 21E §5 or who may otherwise be potentially liable thereunder.

"Priority disposal site", a disposal site which constitutes a substantial hazard to health, safety, public welfare, or the environment.

"Public involvement priority sites" (PIP sites), any disposal site which requires additional public involvement activities, beyond those required for every disposal site. These include, but are not limited to: (1) those disposal sites for which ten or more residents of a municipality in which a disposal site

is located petition the Department to prepare a public involvement plan, (2) any disposal site where the cost of the recommended remedial action is expected to exceed 1 million dollars, or (3) any disposal site where the Department believes the threat posed by the site warrants additional public involvement activities.

"Release", any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, but excludes: (1) emissions from the exhaust of an engine, (2) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in 42 USC Sec. 2014, if such release is subject to requirements with respect to final protection established by the Nuclear Regulatory Commission under 42 USC Sec. 2210, (3) the normal application of fertilizer, and (4) the application of pesticides consistent with their labelling.

"Remedy", those actions consistent with either a temporary solution or a permanent solution at a disposal site taken instead of, or in addition to, short term measures or emergency response actions.

"Remove" or "Removal", the cleanup or removal of released oil or hazardous materials from the environment, such actions as may be necessarily taken in the event of the threat of release of oil or hazardous materials into the environment, the disposal of removed oil or hazardous material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health, safety, welfare or the environment, which may result from a release or threat of release.

"Respond" or "Response" or "Response action", assess, assessment, contain, containment, treat or treatment, remove and removal.

"Sheen", an iridescent appearance on the surface of any river, stream, lake, pond, spring, impoundment, estuary or coastal water which is caused by a release of oil or waste oil.

"Short Term Measure", a measure or combination of measures that are taken in the short term to abate imminent hazards posed by a disposal site.

"Site", any building, structure, installation, equipment, pipe or pipeline, including any pipe into a sewer or publicly-owned treatment works, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any other place or area where oil or hazardous material has been deposited, stored, disposed of or placed, or otherwise come to be located. The term shall not include any consumer product in consumer use or any vessel.

"Statement of claim" or "Statement", an instrument signed by the Commissioner, describing a particular site or sites and naming the person or persons then deemed by the Commissioner to be liable under M.G.L. c. 21E with respect to each such site and their residential addresses, to the extent known to the

Commissioner, and declaring a lien upon the property of such person or persons for the payment of amounts due or to become due from such person or persons to the Commonwealth under M.G.L. c. 21E; provided, however, that neither failure to state any such address nor the designation of an incorrect address shall invalidate such statement; and provided, further, that successive statements, naming other persons so deemed to be liable, may be issued.

"Substantial hazard", a hazard which would pose a significant or otherwise unacceptable risk of harm to health, safety, public welfare, or the environment if it continued to be present for several years.

"Temporary solution", an interim remedial response action which will eliminate any substantial hazard at a disposal site until a permanent solution can be implemented.

"Threat of release", a substantial likelihood of a release.

"Trade secret", anything tangible which constitutes, represents, evidences or records a secret scientific, technical, merchandising, production, or management information, design, process, procedure, formula, invention or improvement.

"Vessel", every description of watercraft of other artificial contrivance used, or capable of being used, as a means of transportation on water.

"Waters of the Commonwealth", all waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, coastal waters and groundwaters. The term shall not include impoundments of chemical wastes.

SUBPART B ORGANIZATION AND RESPONSIBILITIES

40.100 General Organization

Pursuant to M.G.L. c. 21E §4, the Department is authorized to take or arrange for actions in response to releases or threats of release when necessary. M.G.L. c. 21E §3A provides timetables and specifications applicable to the activities of the Department in response actions at disposal sites. This subpart describes the roles and responsibilities of the Department, potentially responsible parties and others in determining the need for and in implementing response actions.

40.101 Role of the Department

(1) Upon notification of the Department by any person or following its own discovery, the Department has final authority and discretion to determine whether a release of oil and hazardous material has occurred or whether a threat of release exists.

(2) The Department has sole authority and discretion to determine whether a release or threat of release requires a response action. This Contingency Plan describes how the Department will:

- (a) Conduct or oversee response actions necessary to address releases and threats of release of oil and hazardous materials, and
- (b) Coordinate and assist in planning, preparedness and response activities with federal agencies, other state agencies, local government, and PRPs.

(3) The Department may perform the following activities in evaluating the need for, and requiring or performing necessary response actions:

- (a) Monitor all reports of releases or threats of release and initiate or require the initiation of response actions, when necessary;
- (b) Collect or oversee the research of pertinent facts regarding releases or threats of release of oil and hazardous materials;
- (c) Conduct response actions or portions thereof;
- (d) Coordinate and oversee response actions conducted by PRPs or other parties to assure their consistency with these regulations;
- (e) Conduct or oversee public involvement activities related to response actions;

- (f) Conduct or monitor site-specific response-related pilot testing and evaluation activities;
- (g) Seek the resources of other federal or state agencies, or local governments under existing authorities to respond to specific releases or threats of release;
- (h) Conduct enforcement actions and cost recovery; and
- (i) Provide technical assistance grants to groups of affected individuals.

40.102 Roles of Other State Agencies and Organizations: Reserved

40.103 Role of Federal Government

(1) Federal Superfund Program

- (a) When a Massachusetts disposal site is also listed on the NPL, it is subject to CERCLA and there is joint federal and state jurisdiction. M.G.L. c. 21E §3A(k) requires response actions for Massachusetts disposal sites which are also subject to CERCLA to be conducted within the deadlines and specifications of these regulations, to the greatest extent possible.
- (b) Locations determined to be disposal sites by the Department are subject to the requirements of M.G.L. c. 21E and 310 CMR 40.000. The Department shall take appropriate actions to obtain any federal monies available to fund response action at disposal sites.

40.104 Role of Local Government: Reserved

40.105 Participation by Other Parties

(1) Section 4 of M.G.L. 21E permits any person threatened or damaged by a release or threat of release to undertake response actions. Such actions must be performed in a manner consistent with these regulations according to the following criteria:

- (a) The response actions must be properly and promptly conducted by other parties within statutory or otherwise stipulated time frames; and
- (b) Other parties, or their representatives, are technically and financially capable of conducting necessary response actions consistent with this Contingency Plan.

(2) In the event that other parties initiate response actions and these actions are determined to be inadequate by the Department, the Department may proceed to perform the required response action.

(3) Any person who without charge renders assistance in a response action at the request of a duly authorized representative of the Department shall not be held liable, notwithstanding any other provision of law, for civil damages as a result of any act or omission by him in removing oil or hazardous material, except for acts or omissions of gross negligence or willful misconduct.

(40.106-40.149: Reserved)

40.150 Public Involvement - General Approach for Sites and Spills - Reserved

40.151 General Principles for Public Involvement in Site Remediation

(1) While the final authority for decision making throughout the response action process rests with the Department, the Department seeks to actively involve the public in decisions regarding response actions at individual disposal sites. The public involvement process will solicit the concerns of the public relative to a disposal site and response actions, and, will address and incorporate these concerns, to the extent possible, in planning appropriate responses.

(2) Activities undertaken to foster public involvement during the site remediation process serve two objectives:

- (a) To inform the public about the risks associated with releases or threats of release of oil or hazardous materials, progress towards remediation, information available on applicable laws, regulations, and remedial technologies and opportunities for public involvement.
- (b) To involve the public in planning response actions at disposal sites where releases of oil or hazardous materials are confirmed.

(3) Several general principles shall guide the development of disposal site-specific public involvement activities:

- (a) These regulations describe minimum public involvement activities that shall be conducted at all disposal sites, and allow for additional activities to be conducted at "Public Involvement Priority Sites" (PIPs).
- (b) Public involvement activities shall focus on the community in which the disposal site is located. These efforts should also include other communities which are or could be affected by a disposal site (e.g., "downstream", "downgradient" or "downwind" communities).
- (c) Disposal sites vary considerably both in the complexity and extent of the hazards as well as the nature and level of public interest. Therefore, in planning site-specific public involvement activities, the community officials and key interested citizens should be consulted to identify the concerns and information needs of the particular community.
- (d) All public notices and announcements issued by the Department pursuant to M.G.L. c. 21E §14 shall state how the public may become involved in response planning and identify a Department spokesperson or contact for citizens to inform the Department of their interest.

- (e) These regulations describe public involvement activities to be conducted for disposal sites under the authority of M.G.L. c. 21E. At any disposal sites that are also federal Superfund sites, federal requirements for community relations will be considered to be minimum requirements. However, the Department (in coordination with EPA) may supplement federal community relations efforts at these sites.
- (f) Public involvement activities undertaken pursuant to these regulations shall be performed in such ways as not to jeopardize current and future enforcement efforts.
- (g) Appropriate public involvement activities shall be undertaken at all disposal sites, regardless of who is conducting the response actions. Responsibility for certain public involvement activities can be assumed by the potentially responsible party with Department oversight. Activities which may be delegated by the Department to PRPs are those designed to provide the public with information regarding the status of response actions. These activities may include providing availability notices of site reports, mailing copies of reports to local officials and citizens, and drafting fact sheets. Activities designed to solicit public comment on proposed response actions shall be primarily conducted by the Department. Public involvement activities for state-funded response actions will be conducted by the Department.
- (h) Subject to application approval, the Department will make grants available for technical assistance pursuant to M.G.L. c. 21E, §14(c), to encourage affected individuals to acquire and disseminate information which will enable them to participate more effectively in the disposal site remediation process. Regulations describing this grant program are published in Subpart F.

40.152 Minimum Activities Required for Public Involvement

(1) Minimum public involvement activities will be conducted at all disposal sites to ensure that the community officials and the public are informed about conditions at the Disposal site and opportunities to become actively involved in planning for responses. These minimum activities are described for each phase in Subpart D of these regulations.

(2) At Public Involvement Priority sites, a site specific Public Involvement Plan will be developed, presented at a public meeting, and revised as appropriate. The Plan shall:

- identify local concerns and sources of information about the site;
- specify public involvement activities to be undertaken throughout the site remediation process and the schedule for conducting these activities, including the specification of methods by which information

about proposed remedial alternatives will be made available to the public and the opportunities that will be provided for the public to comment;

- ° establish procedures for notifying the public about major field work at the disposal site;
- ° establish a local information repository (including specification of its location); and
- ° establish a mailing list which includes individuals who indicate an interest in receiving information about the disposal site.

The Public Involvement Plan shall be implemented as site remediation progresses.

(3) The public shall be made aware of field work involving the use of heavy construction equipment or protective clothing or major sampling activities at disposal sites.

40.153 - Community Site Inspection (Reserved)

40.154 Public Records Request

Requests made pursuant to the Massachusetts Public Records Law, M.G.L. c. 66 §10, to review files relating to disposal sites and locations to be investigated will be handled in accordance with applicable statutory requirements and with 950 CMR 32:00: Public Records Access Regulations and 310 CMR 3.000: Access and Confidentiality of Department Records and Files. Requests to review public records relating to individual disposal sites should be addressed to the appropriate region.

(40.155-199: Reserved)

40.200 Role of Potentially Responsible Parties

(1) Section 5(a) of M.G.L. 21E describes persons who are liable for releases or threat of releases of oil or hazardous material. Classes of liable or potentially responsible parties (PRPs) are defined to include:

- (a) the owner or operator of a vessel or a site from or at which there is or has been a release or threat of release of oil or hazardous material;
- (b) any person who at the time of storage or disposal of any hazardous material owned or operated any site at or upon which such hazardous material was stored or disposed of and from which there is or has been a release or threat or release of hazardous material;
- (c) any person who by contract, agreement, or otherwise, directly or indirectly, arranged for the transport, disposal, storage or treatment of hazardous material to or in a site or vessel from or at which there is or has been a release or threat of release of hazardous material;
- (d) any person who, directly or indirectly, transported any hazardous material to transport, disposal, storage or treatment vessels or sites from or at which there is or has been a release or threat of release of such material; and
- (e) any person who otherwise caused or is legally responsible for a release or threat of release of oil or hazardous material from a vessel or site.

(2) Potentially responsible parties are potentially liable to the Commonwealth for all costs, including but not limited to all costs associated with the assessment, containment and removal of oil and hazardous material and for damages for injury to, destruction of, and loss of natural resources. They are also liable to any person for damage to real or personal property incurred or suffered as a result of such release or threat of release. The liability is strict, joint and several unless a potentially responsible party can establish a basis for apportionment or a defense as set forth in M.G.L. c. 21E §5(b)-(d). Actions to recover costs and for damages to natural resources by the Department are described in 310 CMR 40.600.

(3) 310 CMR §§40.200 through 40.299 sets forth the conditions under which PRPs may conduct response actions as described in 310 CMR §40.300-40.500.

(40.201-40.209: Reserved)

40.210 Notification of Release or Threat of Release

Pursuant to M.G.L. 21E §7, any person described in M.G.L. 21E §5(a) shall immediately notify the Department as soon as he/she has knowledge of a release

or threat of release. The form, timing, and other requirement of this notification are specified in Subpart C Emergency Response Notification, section 40.300. All other releases and threats of release must be reported in accordance with the requirements of M.G.L. c. 21E §7 until such time as Subpart D - 310 CMR 40.500 Site Notification is promulgated.

40.211 Departmental Notice to Potentially Responsible Parties

(1) Notice of Responsibility

- (a) The Department shall attempt to identify and notify parties potentially responsible for a release or threat of release as set forth in M.G.L. c. 21E §5(a). The Department's failure to notify any particular PRP shall not preclude recovery by the Commonwealth against that PRP for response costs or for damages to natural resources. The determination of whom to notify of liability under M.G.L. c. 21E rests in the sole discretion of the Department.
- (b) Such notification may be made orally or in writing. If oral notice is given, such notice shall be followed by a written Notice of Responsibility (NOR). The NOR shall describe: (i) the actions undertaken by the Department to date, (ii) future actions which the Department determines are necessary to respond to the release and threat of release in accordance with this Contingency Plan, (iii) the procedure, and extent to which the PRP can become involved in the response activities, and (iv) the liability which the PRP has or may incur because of the release or threat of release.

(2) Notice of Intent To Take Response Action

Section 4 of M.G.L. c. 21E requires that the Department make reasonable efforts to notify the owner or operator of the site or vessel of its intent to take action prior to undertaking a response action. Such notice will be oral in the case of emergency actions or actions to abate imminent hazards, but shall be written whenever time permits. Such notice shall not be required if the Department has been unable to determine the identity or location of the owner or operator, or when, because of an emergency or other circumstance, providing such notice would be impractical. Failure to give notice to a PRP shall not preclude that PRP's liability under M.G.L. c. 21E or this Contingency Plan.

40.212 PRP Role in Response Actions

(1) The Department may determine that PRPs can perform privately-funded response actions. This determination will be made in accordance with the following criteria:

- (a) Necessary response actions will be properly and promptly conducted by the PRP within statutory or otherwise stipulated time-frames and in accordance with this Contingency Plan.

- (b) The PRPs or their representatives are technically and financially capable of completing necessary response actions consistent with this Contingency Plan.
- (c) The PRP shall cooperate with and participate in public involvement activities outlined in this Contingency Plan and to the extent deemed necessary by the Department.

(2) The Department may require that a PRP provide assurances to the Department that it has sufficient financial resources to complete a response action or a specific phase thereof. This requirement may be imposed by the Department prior to a PRP undertaking response actions or at any time during the conduct of a response action. Forms of financial assurances which may be required by the Department include, without limitation: trusts, letters of credit, escrow agreements and surety bonds.

(3) In the event that a PRP requests an opportunity to conduct response actions at any time after the Department has already commenced response actions, the Department may require that the PRP repay all past costs the Department has incurred in full. These past costs may include costs for work plan development and mobilization. Payment may be required by the Department prior to allowing the PRP to conduct the remainder of response action or the Department may make installment payments of past costs a condition imposed on the PRP under the terms of a consent order.

(4) The Department may refuse to permit a PRP to take over a response action being performed by the Department if the Department determines that the deadlines set forth in Section 40.532 will not be met if the PRP takes over, or that there exists a hazard to health, safety, public welfare or the environment which would be exacerbated by any delay in conducting response actions.

(5) The Department may negotiate a consent order with a PRP which sets forth necessary actions, time periods for the performance thereof, and submittals to the Department required of the PRP. The consent order may include provisions regarding site access, cost recovery, processes for resolving disputes arising under the consent order, and any other matter not provided for in these regulations.

(6) PRPs conducting a response action shall identify all permits, approvals, or other conditions which may be imposed on the conduct of such response action by any local, state or federal regulatory agency and shall proceed to obtain the necessary permits or approvals sufficiently far in advance of deadlines imposed under M.G.L. c. 21E, 310 CMR 40.000, or any order issued by the Department, in order to allow completion of work within the established timeframes.

(7) In the event that a PRP proceeds to perform response actions and the PRP's actions are thereafter determined to be inadequate by the Department, the Department may:

- (a) Proceed to perform the required action itself and seek cost recovery pursuant to M.G.L. c. 21E and this Contingency Plan, or
- (b) Negotiate a consent order with the PRP, if one does not already exist, to complete the required response action pursuant to M.G.L. c. 21E and this Contingency Plan.
- (c) Issue an Order to the PRP to perform the necessary response action pursuant to M.G.L. c. 21E §9.

(8) Nothing herein shall be interpreted to prevent the Department from undertaking a response action pursuant to its authority under M.G.L. c. 21E §4 or ordering response actions pursuant to M.G.L. c. 21E §9.

SUBPART D RESPONSE ACTIONS AT DISPOSAL SITES

40.500 Site Notification Requirements: - Reserved

(40.501-40.519: Reserved)

40.520 Discovery of Locations To Be Investigated

(1) The Department receives information from a variety of sources concerning locations to be investigated as possible disposal sites. These sources include, but are not limited to:

- (a) Federal Agencies (e.g., the Environmental Protection Agency);
- (b) State Officials (e.g., various divisions within the Department, and the Department of Public Health);
- (c) Community Officials (e.g., Board of Health and Fire Department);
- (d) Citizens; and
- (e) Potentially Responsible Parties.

(2) Pursuant to M.G.L. c. 21E §3A(c), the Department shall undertake a comprehensive program to identify potential disposal sites by: using required notifications, providing incentives to the general public and identifying locations reasonably likely to be disposal sites based upon past uses of the location or other relevant factors. Investigations conducted under this site discovery program may include interviewing or examining the records of persons or entities who have been involved in the production, use, transportation or disposal of oil or hazardous materials or any other methods the Department considers appropriate.

40.521 Listing of Locations To Be Investigated

(1) M.G.L. c. 21E §3A(b) requires that the Department publish and provide quarterly updates to a list of locations to be investigated (LTBI) as possible disposal sites. 310 CMR 40.520 through 40.525 describe how LTBI are identified, placed on the LTBI list, deleted from the LTBI list and placed on the Deleted list or the Confirmed list, and how disposal sites on the Confirmed list are placed on the Remedial list.

(2) Whenever the Department obtains information about a location, it will evaluate the information available on that location using the screening criteria set forth in 310 CMR 40.522 to determine if it should be listed as LTBI. The Department will then determine whether the location will be immediately published on the LTBI list or kept temporarily in reserve using the criteria described in 310 CMR 40.523.

(3) For any location reported to the Department by a Massachusetts resident, M.G.L. c. 21E §14(a) requires that the Department decide whether to list such location as a LTBI no later than one month after it was reported to the Department.

(4) The Department may hold confidential for up to 180 days all information regarding any LTBI if it is determined that public disclosure could interfere with enforcement actions.

(5) The fact that an area of a release or threat of release of oil or hazardous material does not appear on the LTBI list or the Confirmed list, or that it has been placed on the Deleted list or the Remedial list, shall not prevent the Department from taking or requiring response actions in accordance with this Contingency Plan.

40.522 Screening Criteria for Locations To Be Investigated

The screening criteria for LTBI exclude situations from listing if M.G.L. c. 21E is not applicable to them, or because the Department determines that the situation does not constitute a release or threat of release of oil or hazardous material, or because the conditions at the location are inconsistent with the definition of a disposal site.

(1) A LTBI must be a structure, well, pit, pond, lagoon, impoundment, drainage ditch, landfill, or a location having one or more of these, or is some other place where uncontrolled oil or hazard materials is alleged or reported to be located. The location must not be comprised solely of the ambient air or surface water of the Commonwealth and cannot be a consumer product in consumer use or a vessel.

(2) The following situations are not considered LTBI because they are not consistent with the definition of releases or threats of releases of oil or hazardous material, or they are specifically excluded from releases that constitute disposal sites.

- (a) lead-based paint emanating from a point of original application;
- (b) a material which resulted from emissions from the exhaust of an engine used to power a vehicle of conveyance;
- (c) building materials still serving their original intended use or emanating from such use;
- (d) a release of source, by-product, or special nuclear material from a nuclear incident, as these terms are defined in 42 USC §2044, if such a release is subject to requirements with respect to final protection established by the Nuclear Regulatory Commission under 42 USC §2210;

- (e) the application of pesticides consistent with their labeling; or
- (f) the normal application of fertilizer.

(3) The oil or hazardous material alleged or reported must have been spilled, leaked, poured, abandoned, emitted, emptied, discharged, injected, escaped, leached, dumped, discarded or otherwise disposed of.

(4) Based upon the uses of the property in question, the conditions reported or other information available to the Department, the Department shall determine whether the location is reasonably likely to be a disposal site.

(5) The Department may choose not to place a location on the LTBI list if the Department determines that the situation is being adequately regulated by another program or government agency pursuant to M.G.L. c. 21E §3(c).

40.523 Criteria For Immediate Placement on the Location To Be Investigated List

(1) Once a location has been examined according to the screening criteria and classified as a LTBI, the Department shall determine if the location should be immediately placed on the LTBI list or placed temporarily in reserve, pursuant to M.G.L. c. 21E §3A(b).

(2) The Department will evaluate the potential seriousness of the problem at the location in order to determine whether locations shall be immediately placed on the LTBI list. The evaluation will consider available information in order to rank locations as high, medium, or low priority for listing. Factors the Department may consider in this evaluation include:

- (a) The reliability of the information provided on the location;
- (b) The quantity of the material allegedly released;
- (c) The hazard potential (seriousness of effects) of the oil and hazardous material allegedly released or threatened to be released;
- (d) The potential receptors in the vicinity and the likelihood and degree of exposure to oil or hazardous material through direct contact, drinking water, air, or the food chain; as well as the threat of fire and/or explosion; and
- (e) The likelihood and degree of effects on the environment posed by the location.

(3) The Department may list the higher ranked locations, and hold the others in reserve for listing at a later date, providing that at least 1000 locations per year are listed. Once a location is placed on the LTBI list, it will undergo a preliminary assessment and Phase I. Based on the results of these investigations,

the location will be removed from the LTBI list and either placed on the Deleted list or the Confirmed List.

40.524 The Deleted List

Locations that are listed on the LTBI list will be moved to the Deleted list if the Department determines that no further action is necessary, based on the results of the Preliminary Assessment and, in some cases, the Phase I - Site Investigation. Locations may also be moved from the LTBI list to the Deleted list if the Department determines that M.G.L. 21E is not applicable to the location.

40.525 The Confirmed List

Locations will be moved from the LTBI list to the Confirmed list if the Department determines that they are disposal sites pursuant to C10 CMR 40.541 and 40.543.

40.526 The Remedial List

Disposal sites that are listed on the Confirmed list will be moved to the Remedial list when the Department determines that no further actions are necessary based on information available to the Department at the time.

(40.527 - 40.529: Reserved)

40.530 General Provisions for Site Remediation

40.531 Overview of Assessment and Remediation of Releases of Oil and Hazardous Materials

(1) M.G.L. c. 21E §3AL sets forth processes and deadlines that are applicable to the assessment and remediation of disposal sites. The process described in this Contingency Plan for assessment, prioritization, and remediation of disposal sites is intended to provide for an efficient and consistent treatment of disposal sites in the Commonwealth. These regulations (310 CMR 40.000) describe how the Department will determine whether a location is a potential disposal site and should be a location to be investigated (LTBI). Such locations are evaluated in Preliminary Assessments and Phase I - Site Investigations and some locations are designated as disposal sites and placed on the Confirmed list; when no further investigation is required, LTBI are placed on the Deleted list. Disposal sites are classified in order to identify priority disposal sites, which constitute a substantial hazard to health, safety, public welfare, or the environment. Priority disposal sites must be remediated more quickly than other disposal sites. All disposal sites will undergo a Phase II - Full Evaluation. In Phase III, remedial action alternatives are identified and evaluated and a permanent or temporary solution is selected. In Phase IV, the selected remedial response action is implemented. Each of these phases are briefly described below:

- (a) Preliminary Assessment - an initial assessment to rapidly evaluate the need for emergency action (Short-Term Measures), further study, or "no action". A Short-Term Measure may be taken at any time during the response process to prevent or eliminate imminent hazard. A Preliminary Assessment must be completed within one year of listing on the LTBI list pursuant to M.G.L. c. 21E §3AL.
- (b) Phase I - Site Investigation - a preliminary investigation to determine whether a location should be confirmed as a disposal site and, if so, whether that disposal site should be classified using the Site Classification System as a priority disposal site. M.G.L. c. 21E §3A requires that this investigation be completed within two years of a location's listing as a LTBI.
- (c) Phase II - Full Evaluation - a detailed evaluation of the extent and nature of the contamination and risk posed by a disposal site. The Full Evaluation is designed to be a basis for the development of remedial response action alternatives.
- (d) Phase III - Development of Remedial Action Alternatives - an identification and analysis of alternatives for remedial response actions. A final remedial response action which is a permanent solution will be selected as a result of this analysis, if feasible. If a permanent

solution is not feasible, an interim remedial response action, consisting of a temporary solution, will be selected and a plan developed for identification and implementation of a permanent solution.

- (e) Phase IV - Implementation of Remedial Actions - the implementation of the remedial action selected in Phase III including the design, construction, and initial operation of the remedial measure. Pursuant to M.G.L. c. 21E §3A, an interim remedial response action (temporary solution) or a permanent solution must be implemented at every priority disposal site and a plan developed for a final remedial response within four years of listing of the location as a LTBI. At other disposal sites a plan for a final remedial response must be completed within seven years of listing as LTBI.
- (f) Phase V - Operation and Maintenance - the operation and maintenance of the remedial action implemented at a disposal site in Phase IV.

(2) This MCP provides the basic requirements for the response action process. As the locations and disposal sites being investigated and remediated represent a wide range of conditions, specific requirements and details shall be determined by the Department on a site-by-site basis.

40.532 Timing and Approvals

(1) Statutory Deadlines. M.G.L. c. 21E §3A deadlines require the completion of a Preliminary Assessment within one year of listing as a LTBI, and the Phase I - Site Investigation within two years. For priority disposal sites, a permanent solution, if feasible, must be implemented within four years. If a permanent solution is not feasible, an Interim Remedial Response Action (IRRA) and the final remedial response plan must be completed within four years. For all other disposal sites, the final remedial response plan must be completed within seven years.

- (a) Pursuant to M.G.L. c. 21E §3AL(1), the Department can extend a deadline for the completion of an IRRA up to one year if conditions beyond the control of the Department and peculiar to a specific disposal site substantially impede compliance with a deadline for an IRRA.
- (b) The Department may extend for up to one year any statutory deadline if federal monies are not available within the deadline, but the Department anticipates that such monies would be available within the extended time period, pursuant to M.G.L. c. 21E §3AL(1)

(2) Submissions and Approvals. In order to assure that response actions conducted by potentially responsible parties or other parties are consistent with these regulations, submission of results, assessments, plans and other documents will be required throughout the process. In addition, at several critical points, written Departmental approval is required. The Department will require the following submissions; approval requirements are noted: -

- (a) Preliminary Assessment Form as described in Section 40.541.
- (b) Phase I - Site Investigation Report as described in Section 40.543.
- (c) Work Plan for the Phase II - Full Evaluation as described in Section 40.545. Written Departmental approval of the Phase II work plan is required.
- (d) Phase II - Full Evaluation Report as described in Section 40.545. Written Departmental approval of the Phase II Report is required.
- (e) Phase III Report and Final Remedial Response Plan as described in Section 40.547. Written Departmental approval of the Phase III Report, including the recommended remedy, and Final Remedial Response Plan are required.
- (f) The Preliminary Design as described in Section 40.548.
- (g) The Final Design as described in Section 40.548. Written Departmental approval of the final design is required.

(h) The Final Inspection Report as described in Section 40.548.

- (3) The above submissions and approvals represent the minimum requirements. The Department may require additional submittals based upon specific facts related to the disposal site.

(40.533-40.539: Reserved)

40.540 Phases of Site Remediation

40.541 Preliminary Assessment

(1) Purpose

- (a) A Preliminary Assessment is a study used to make an initial determination as to whether a Short-Term Measure, and/or further study, or no action is needed to assess a location to be investigated.
- (b) Primary Goal: A Preliminary Assessment is intended to rapidly evaluate the existence and extent of a release or the threat of a release at a location to be investigated.

(2) Scope

A Preliminary Assessment is performed whenever a location is listed as a Location To Be Investigated (LTBI) pursuant to M.G.L. c.21E § 3A(b). Preliminary Assessments are predominantly fact-finding investigations of existing information and include making one location inspection. The Preliminary Assessment is not an in-depth or comprehensive examination of the location but includes researching and assembling existing data. This information is compiled on a Preliminary Assessment Form, to be completed by the Department or a potentially responsible party. Based on the information obtained, a determination is made by the Department as to what type of response is needed.

(3) Activities

Preliminary Assessment activities include, but are not limited to the following:

- (a) Obtaining specific physical and historical details about the location.
- (b) Identifying the location on maps. The UTM coordinates and latitude and longitude should be included.
- (c) Performing a file search to review existing local, state, and federal documentation, e.g., permits, past environmental violations and complaints, types of materials used at the location.
- (d) Consulting with community officials and/or residents, when appropriate.
- (e) Identifying potential human and environmental receptors, e.g., proximity to water supplies or residential areas.
- (f) Conducting a perimeter survey at the location.
- (g) Compiling any existing monitoring data for the location.

- (h) Performing initial sampling and analysis and/or field screening, when appropriate.

(4) Decision Criteria

After reviewing the Preliminary Assessment, the Department will determine what further action is needed, if any, at a location based on the following considerations:

- (a) Nature, characteristics, and quantity of oil or hazardous materials released or posing a threat of release from the location.
- (b) The Department's prior knowledge of the location or information found in file searches.
- (c) Proximity of the location to environmentally-sensitive receptors and to human populations.
- (d) Imminent or substantial hazard to health, safety, public welfare or to the environment posed by the oil or hazardous materials at the location.
- (e) Regulatory status of the owners and/or operators of the location.
- (f) Reliability of information obtained about the location.

(5) Possible Outcomes

A Preliminary Assessment can result in the identification of an imminent hazard and one of the following three determinations:

- (a) Confirmation that the location is not a disposal site because no release of oil or hazardous materials has occurred and no threat of release exists, or because the Department determines that no remediation is required.
- (b) Confirmation that there has been a release or there is a threat of release of oil or hazardous materials at or from the location and it is determined to be a disposal site, requiring further assessment and remediation under this Contingency Plan.
- (c) It is unclear whether there has been a release or there is a threat of release of oil and/or hazardous materials from the location.

(6) Possible Actions

Based on the results of the Preliminary Assessment, one or more of the following actions may be taken:

- (a) If it is determined that the location is not a disposal site, the location will be removed from the LTBI list and placed on the Deleted list.
- (b) If a location is determined to be a disposal site (and placed on the Confirmed list) or if there is a need to investigate the location further in order to confirm it as a disposal site, Phase I - Site Investigation activities will be taken or required at the location.
- (c) If it is determined that an imminent hazard exists, Short Term Measures will be taken or required at the location.

(7) Public Involvement

The outcome of a Preliminary Assessment will be documented to the public in the form of the site lists which are published quarterly.

40.542 Short-Term Measures

(1) Purpose

- (a) A Short-Term Measure is taken to abate, prevent, or eliminate imminent hazards due to a release or threat of release, the continued or future migration, potential for fire and/or explosion, or direct contact from or with oil or hazardous materials. Short-Term Measures may also be implemented for engineering or cost-effectiveness reasons. Short-Term Measures may be taken at locations to be investigated or disposal sites.
- (b) Primary Goal: Short-Term Measures are actions which contain, isolate, remove, or secure an existing release or alleviate a threat of release and thereby eliminate or prevent an imminent hazard to the public health, safety, public welfare or to the environment until such time as any substantial hazard at the location or disposal site can be addressed through the full site assessment and remediation process. Whenever a Short-Term Measure is implemented, the disposal site will continue to be evaluated through the full site remediation process.

(2) Scope

The extent, type, timing and frequency of a Short-Term Measure(s) will be determined by the factors listed in (3) below. The need for performing Short-Term Measures must be evaluated constantly throughout the site remediation process and such measures must be implemented immediately whenever an imminent hazard is discovered.

(3) Factors

The severity of the following hazards shall be considered in identifying an imminent hazard and in determining the need for and extent of a Short-Term Measure:

- (a) Existing or potential exposure of nearby human, plant, and animal populations to oil or hazardous materials.
- (b) Existing or potential contamination of drinking water supplies or environmentally sensitive areas by oil or hazardous materials.
- (c) Oil or hazardous materials in drums, barrels, tanks, or other bulk storage containers, which pose a threat of release.
- (d) The presence and levels of oil or hazardous materials in soils largely at or near the surface of the location or disposal site.

- (e) Weather conditions that may cause or contribute to the migration or release of oil or hazardous materials.
- (f) Threat of fire or explosion.
- (g) Any other site-specific factors which the Department determines may constitute imminent hazards to the public health, safety and welfare, or the environment.
- (h) Health, safety, public welfare, or environmental, engineering or cost effectiveness reasons that make it prudent to undertake a Short-Term Measure prior to or during the completion of comprehensive investigations and/or studies. For example, if the Department learns of a contaminated plume which is continuing to migrate, the Department may determine that it is more cost-effective to take a Short-Term Measure immediately to prevent the plume from spreading than to wait and potentially cause an increase in the future clean-up costs.

(4) Implementation of Short-Term Measures

The Department will immediately ensure the elimination or prevention of an imminent hazard by conducting a Short-Term Measure or by using its enforcement powers delineated in M.G.L. c. 21E.

In selecting an appropriate Short-Term Measure, the action chosen should preserve options for future remedial actions. If there are any potential on- or off-site impacts of the Short-Term Measure and it is determined that monitoring is required, a contingency plan addressing the potential release or impact shall be prepared and approved by the Department prior to implementation of the Short-Term Measure.

Each of the following options shall be considered, at a minimum, when there is a need for a Short-Term Measure. However, this list will not limit the Department from taking or requiring any other actions deemed necessary in response to any imminent hazard.

- (a) Fences, warning signs (multilingual and symbolic, if necessary), or other security or site control precautions to prevent unauthorized human access or animal access to the location or disposal site;
- (b) Drainage controls (e.g., run-off or run-on diversions) to prevent or reduce precipitation or run-off (e.g., flooding) that may result in continued or future migration or release of oil or hazardous materials;
- (c) Construction or stabilization of berms, dikes, or impoundments to maintain their integrity;

- (d) Temporary covering or capping of contaminated soils or sludges to prevent or reduce public health or environmental risks associated with direct contact and/or to prevent or reduce the migration of oil or hazardous materials into soil, groundwater, surface water, or air;
- (e) Installation of waste or product recovery and groundwater treatment systems to reduce migration of oil or hazardous materials;
- (f) Removal of contaminated soils to reduce public health or environmental risks associated with direct contact or to reduce the migration of oil or hazardous materials;
- (g) Removal of the contents of or removal of drums, barrels, tanks or other bulk containers which contain or may contain oil or hazardous materials to reduce the likelihood of spillage, leakage, and to limit the risk resulting from exposure to humans, wildlife, or elements of the food chain, or fire or explosion;
- (h) Temporary evacuation of the area or relocation of residents to control the potential for human exposure, adverse health effects, or safety hazards associated with the location or disposal site.
- (i) Provision of temporary alternative water supplies to minimize the risk of human health effects.
- (j) Any other action that is consistent with the primary goals of a Short-Term Measure.

(5) Monitoring

If appropriate, monitoring will be conducted during the implementation of a Short-Term Measure and upon its completion, in order to:

- (a) Document whether there are any on- or off-site impacts on the public health, safety and welfare or the environment during the implementation of a Short-Term Measure (e.g., potential air emissions during construction).
- (b) Evaluate the effectiveness of the Short-Term Measure. For example, data collected from product recovery and groundwater treatment systems can indicate the degree of effectiveness of the source control measures.

(6) Possible Outcomes

Short-Term Measures should alleviate any imminent hazards at a location or disposal site. The Department will then determine if the Location To Be Investigated will be placed on the Deleted list or continue through the response process. Disposal sites will continue through the full site remediation process.

(7) Site-Specific Health and Safety Plan

A Site Health and Safety Plan must be prepared and implemented for on-site personnel or employees of investigating teams, contractors, or subcontractors.

(8) Public Involvement

(a) Prior to, during and at the completion of a Short-Term Measure at any location or disposal site, the appropriate community officials shall be notified about the purpose, expected duration, and possible subsequent actions of the field work.

(b) The Public Involvement Plan for a PIP site shall include public involvement procedures for a Short-Term Measure.

40.543 Phase I - Site Investigation

(1) Purpose

- (a) A Phase I Study - Site Investigation should confirm whether there has been a release or there is a threat of release of oil or hazardous materials at a location, if this was not established in the Preliminary Assessment. In addition, the Site Investigation will provide information for use in the site classification system set forth in 310 CMR 40.544.
- (b) Primary Goal: A Site Investigation is intended to characterize conditions at a location in order to establish the existence of, and preliminarily evaluate the extent of a release or threat of release of oil or hazardous materials. Sufficient information must be assembled to allow for the classification of disposal sites in accordance with 310 CMR 40.544.

(2) Scope

A Phase I Study - Site Investigation is not intended to provide a comprehensive assessment of conditions at a location. A Site Investigation should build upon the information assembled in the Preliminary Assessment and develop the following information in a report to be prepared by or submitted to the Department:

- (a) A property history which details past and present uses of the location, including a description of past and present property management practices regarding the use, storage, treatment, or disposal of oil or hazardous materials.
- (b) An initial characterization of the nature and extent of oil or hazardous materials present at the location.
- (c) Identification of pathways by which oil or hazardous materials may migrate to and from the location and an initial identification of human and environmental receptors which may be affected by the release or threat of release.
- (d) Identification by the Department of parties potentially liable for the release or threat of release of oil or hazardous materials at or from the location.

(3) Activities

A Phase I Report shall include the development of a location description and history and initial screening/sampling. This information will be described

in the Phase I Report to be prepared by or submitted to the Department. The purpose of the following activities is to obtain enough data to initially characterize conditions at the location and to enable the Department to determine whether the location is a disposal site, and whether the disposal site is a priority disposal site.

(a) Location History

The location history shall include:

1. A list of past and present owners/operators of the location and of other potentially responsible parties as described in M.G.L. c.21E §5(a).
2. A description of past and present uses of the location, including commercial activities and industrial or manufacturing processes. Local sources of information should be consulted and documented in the Phase I report.
3. A description of types (including generic names, chemical names, and trade names, if available) and quantities of oil or hazardous materials used, treated, stored, disposed, or generated through past and present uses of the location.
4. A history of all disposal practices at the location, including disposal areas, and types and quantities of material disposed. This should include a description of disposal areas that are not located on the property to the extent that such locations are known.
5. For all specific areas within the location where oil or hazardous materials were used, stored, treated or disposed, a separate description of the conditions of containment and the types and amounts of materials used, stored, treated, or disposed.
6. A history of all release incidents, fires or explosions, environmental licenses or permits (discharge or operating) and violations; as well as other federal, state, or local occupational health and safety or environmental regulatory histories of the location, including information on past/present storage of flammable liquids pursuant to fire regulations.
7. A brief description of past and present land use on adjacent properties.

(b) Location Description

The location description shall include:

1. Geographical placement of the location, including a locus map on a United States Geological Survey (USGS) map. The UTM coordinates and latitude and longitude should be included.
2. A representation of the location by copies of plot-plans, topographic maps, aerial photos, or property photos.
3. Characterization of the geologic, hydrologic, and hydrogeologic conditions at and surrounding the location using existing information.
4. Description of present property conditions, including, but not limited to:
 - Overt evidence of a release or threat of release including identification of areas, if any, of uncontained migrating, free-floating oil or hazardous materials in groundwater.
 - Overt evidence of environmental damage.
 - Physical location of, and information on facilities, structures, or conduits where oil or hazardous materials were used, treated, stored, disposed, processed, or generated.
 - Areas of fill and distribution of fill over the property.
 - Evidence of blasting and excavating activities.
5. Identification of the placement of utility lines including: municipal water supply lines, private water supply lines (including any unused wells), sewer lines, subsurface disposal systems and other subsurface utilities at the location or in its vicinity.
6. Initial characterization of potential exposure pathways including, but not limited to:
 - the location of mapped wellhead protection areas (Zone II), public water supply wells, or private water supply wells in the vicinity of the location.
 - the potential for direct human contact with oil or hazardous materials at or originating from the location.
 - the description of land use in the vicinity of the location.
 - the presence of nearby surface waters that are public recreation areas, upstream of a potable water supply intake

or upstream of the recharge area for a public or private water supply well(s).

- the identification of food-chain exposure pathways.
- a description of proximate environmentally sensitive areas such as terrestrial or aquatic habitats, marine sanctuaries, wetlands or areas prone to flooding, tidal areas and freshwater tidelines, wilderness areas.

(c) Initial Location Sampling and Screening

Field investigations and observation should be designed to:

- demonstrate that a release of oil or hazardous material has occurred or that a threat of release exists at or from the location;
- identify to the extent possible the types and quantities of oil or hazardous materials present at the location; and
- characterize, to the extent possible, the pathways and extent of migration of oil and hazardous material at or from the location.

Field investigations should be based on conditions at the location, the potential exposure pathways, and the Site Classification criteria as set forth in 310 CMR 40.544. The field investigation should be designed to allow the Department to determine whether the location is a disposal site and whether it is a priority disposal site.

Several techniques can be used for this phase of field investigation, the selection of which will depend on location-specific factors. These techniques include but are not limited to:

- Field screening (e.g., using portable instrumentation).
- Field sampling (of various media) with subsequent laboratory analysis.
- Geophysical investigations.

All QA/QC procedures employed in field investigations must be documented.

(d) Short-Term Measures

The Site Investigation should include an evaluation of the need for Short-Term Measures as described in 310 CMR 40.542.

(4) Possible Outcomes

A Phase I Study - Site Investigation can result in the identification of an imminent hazard requiring a short-term measure and one of the following determinations:

- (a) Confirmation that the location is not a disposal site because no release of oil or hazardous material has occurred and no threat of release exists, or because the Department determines that no remediation is required.
- (b) Confirmation that there has been a release or a threat of release of oil or hazardous materials from the location and it is a Disposal Site requiring further assessment and remediation under this Contingency Plan.

(5) Possible Actions

Based on the outcome of a Phase I Study, one or more of the following actions may be taken:

- (a) If it is determined that the location is not a disposal site, the location will be removed from the LTBI list and placed on the Deleted list.
- (b) If the location is determined to be a disposal site, it will be placed on the Confirmed list and a Phase II - Full Evaluation must be initiated at the disposal site.
- (d) If it is determined that an imminent hazard exists, Short-Term Measures will be performed at the disposal site.

(6) Site-Specific Health and Safety Plan

A Site Health and Safety Plan must be prepared prior to on-site activity for on-site personnel or employees of investigating teams, contractors, or subcontractors.

(7) Public Involvement

(a) At the end of each Phase I investigation, the following actions shall be taken to inform the public about the status and outcome(s) of the investigations.

1. Within thirty days of the end of the Phase I investigation, the Department shall publish a legal notice in newspapers which circulate to the affected communities pursuant to M.G.L. c. 21E §14(a). The legal notice shall summarize the results of the

investigation, and shall state whether the location is or is not a disposal site. If the location is a disposal site, the notice shall also include a statement as to whether the disposal site is a priority disposal site and a description of methods by which local residents can indicate their interest in participating in planning for remedial response action(s). All notices shall also describe how local residents can obtain additional information.

2. Within thirty days of the end of the Phase I investigation, a press release that has been approved by the Department shall be provided to local newspapers which circulate to the affected communities. The press release shall contain the same information as the legal notice described in (1) above.
3. At least three days prior to publishing the legal notice and press release, a copy of the legal notice, the press release, and any Notices of Responsibility shall be sent to the Chief Municipal Officer and the Board of Health in the affected community(ies).

(b) At disposal sites which are designated to be Public Involvement Priority (PIP) Sites, the following actions shall be taken at the end of a Phase I Study or whenever the disposal site is designated as a Public Involvement Priority Site.

1. A Public Involvement Plan shall be prepared which identifies communities in which public involvement activities shall be conducted (refer to 40.152(2)). The plan must ensure that: 1) sufficient notice is provided to the affected community about specific milestones in the response action process; 2) the community is provided with access to public records concerning the PIP disposal site and 3) opportunities for the community to comment on proposed response actions are identified. Activities that may be specified to accomplish these objectives shall include, but are not limited to: establishing a minimum of one local information repository in the affected community(ies), identifying local concerns and mechanisms for responding to them, establishing a site mailing list and conducting activities to seek public involvement. The public involvement plan will be tailored to the specific needs of the affected community.
2. A public meeting shall be held in the affected community(ies) to present the draft Public Involvement Plan, obtain public comments, and provide information about site conditions.
3. The Public Involvement Plan shall be revised as appropriate, and shall be made available to community officials and the affected community(ies).

40.544 Interim Site Classification System

(1) Purpose

- (a) The interim Site Classification System will be used by the Department to segregate disposal sites into two groups based on the degree of risk posed by the sites until the final Site Classification system is developed.
- (b) Primary Goal: The Site Classification System will identify those disposal sites in the Commonwealth that are priority disposal sites, that is, disposal sites that pose a substantial hazard to health, safety, public welfare, or the environment.

(2) Scope

All disposal sites will be classified by the Department according to this Site Classification System in order to identify priority disposal sites pursuant to M.G.L. c. 21E §3A(d). Priority disposal sites are then subject to specific timing and procedural requirements. Classification will be based on information gathered in the Preliminary Assessment and Phase I - Site Investigation. The priority status of a disposal site may be reevaluated as additional data become available in later phases of the site remedial response action process. The system is intended to classify sites based on the degree of risk posed by the disposal site. This classification system is based on an evaluation of risk, considering the probability of exposure to humans and the environment and the probability and expected severity of the effects that may result from the exposure. In order to address the probability of exposure, the site classification system evaluates existing conditions, and considers conditions that may exist in several years. In the Site Classification System, some of the criteria assume that, if exposure occurs, then the effects would represent a risk. Other criteria explicitly evaluate the severity of expected effects through the use of environmental standards and criteria.

(3) Activities

In order to determine whether a disposal site poses a substantial hazard and therefore is a priority disposal site, the Department will consider a number of criteria. A disposal site that meets one of the listed criteria will usually result in a priority classification.

A disposal site which currently displays or may display within several years one or more of the following characteristics will be classified by the Department as a priority disposal site as defined by M.G.L. c. 21E, unless evidence is demonstrated to the contrary.

- (a) There is or could be physical access to a disposal site that provides the opportunity for direct contact with oil or hazardous materials

via surface contamination, open lagoons, drum storage areas or sludges.

- (b) There is uncontained, migrating, free-floating oil or hazardous materials in groundwater or surface water at the disposal site.
- (c) There is evidence of groundwater contamination with oil or hazardous materials at or from the disposal site at levels exceeding State or Federal drinking water standards/guidelines (or detectable levels of contaminants for which there are no State/Federal standards or guidelines) and the evidence of groundwater contamination is:
 - 1. within a mapped wellhead protection area (Zone II) of a public water supply well(s), or
 - 2. if no wellhead protection area has been mapped, then within a one-half mile radius of public water supply well(s), or
 - 3. found in or is likely to be found in private water supply well(s), or
 - 4. found in or is likely to be found in areas of planned or potential water supplies.
- (d) A disposal site which meets the above criterion (c) will be considered a priority disposal site unless one or more of the following is established to the Department's satisfaction:
 - 1. proof that a hydrogeologic connection does not exist between the groundwater containing oil or hazardous materials and the water supply, or
 - 2. proof that the concentrations of oil or hazardous materials found, for which there are no drinking water standards or guidelines, will not be harmful to those drinking the water, or
 - 3. proof that the oil or hazardous materials have not and will not migrate to the public or private water supply well(s).
- (e) There is evidence of a release of oil or hazardous materials from the disposal site into surface water that is upstream of a public water supply intake structure, or upgradient of a wellhead protection area, or public well recharge area unless one or more of the following is established to the Department's satisfaction:
 - 1. there is no hydrogeologic connection between the release of oil or hazardous materials and the well(s), or

2. for those situations where there is a hydrogeologic connection, concentrations at the well are not likely to exceed state or federal drinking water standard/guidelines, or
 3. the release of oil or hazardous materials has not and is not likely to reach the surface water supply intake at concentrations exceeding state or federal drinking water standards/guidelines, or
 4. concentrations of oil and hazardous materials found or predicted at either the surface water supply intake, the wellhead protection area, or the recharge area of a public water supply well(s), and for which there are no drinking water standards or guidelines, will not be harmful to those drinking the water.
- (f) There is evidence of a release of oil or hazardous materials from the disposal site to surface water or groundwater that has resulted or could result in surface water concentrations which exceed ambient water quality criteria for the protection of aquatic life or human health. Such surface water may be public recreation areas and/or sensitive environmental areas, e.g., marine sanctuaries, wild and scenic rivers, tidal areas, farmland, wilderness areas, etc.
- (g) There is a threat of fire or explosion posed by the disposal site.
- (h) There are or could be air emissions from oil or hazardous materials at the disposal site which could adversely impact human or environmental receptors, as evaluated by Massachusetts Allowable Ambient Air Levels (AALs) or other state/federal criteria or standards, if available.
- (i) There are releases of oil or hazardous materials at or from the disposal site that have affected or could adversely affect the human food chain.
- (j) There is any other information available to the Department that indicates that the disposal site may pose a significant or otherwise unacceptable risk of harm to health, safety, public welfare, or to the environment if left in its present state for several years. This criterion is to be used only if none of the previous eight criteria apply.

(4) Possible Outcomes

Site classification will result in the designation by the Department of some disposal sites as priority disposal sites.

40.545 Phase II - Full Evaluation

(1) Purpose

- (a) A Phase II-Full Evaluation is a complete investigation of a disposal site, and its scope of work is based upon the results of a Preliminary Assessment and Phase I Study. It is intended to characterize the type and quantity of oil and hazardous materials released at or from the disposal site and to determine the degree of risk that the disposal site presents to health, safety, public welfare, and the environment. A Phase II Study is intended to provide data necessary to define and assess remedial action alternatives. A systematic assessment of the entire disposal site may be necessary to ensure that sources of oil or hazardous material releases do not go undetected.
- (b) Primary Goal: A Phase II Study must provide a complete description and evaluation of the extent to which oil and hazardous materials have been released at or from the disposal site. In addition, the Phase II Study must evaluate the risk of harm to health, safety, public welfare and the environment posed by the disposal site.

(2) Scope

A Phase II study must be described in detail in a Phase II proposal. This proposal must include a sampling plan, describing the media and locations to be sampled and the rationale. The plan should provide for a comprehensive hydrogeologic investigation, as well as sampling in other media, as appropriate. Justification must be provided for any media not included in the sampling plan.

A Phase II Study should be tailored to the site-specific conditions and the results of Phase I-Site Investigation. The level of effort and study detail shall take into consideration the following:

- (a) The nature, physical and chemical characteristics, including mobility, and quantity of oil and hazardous materials released or posing a threat of release at or from the disposal site.
- (b) Information available on the disposal site and its history.
- (c) The threat to health, safety, public welfare and to the environment posed by the disposal site, including the disposal site's proximity to human and environmental receptors.

All of the activities described in 40.545(4) shall be completed in a Phase II Study unless the exclusion of a particular item(s) can be justified in the Phase II proposal.

The Phase II proposal may need to be revised as specific information becomes known about a disposal site and additional Phase II Study becomes necessary.

(3) Phase II Proposal

After a Phase I Study and Report have been completed, a proposal to perform a Phase II Study must be completed for all disposal sites. If PRPs are conducting this work, the proposal must be submitted to and approved by the Department. The Phase II proposal must include, but shall not be limited to, the following:

- (a) Scope of work. Work should be specified to fill in data gaps identified in Phase I and to aid in remedial alternative development. If certain requirements are not included in the scope of work, a justification must be provided for their exclusion.
- (b) Schedule for implementation of Phase II Study.
- (c) Sampling plan for each media and analytical protocols.
- (d) Quality assurance/quality control plan.
- (e) Health and Safety plan, including measures to safeguard nearby residents.
- (f) Public Involvement Activities.

(4) Phase II Activities

The following activities must be performed during a Phase II Study unless a justification is provided for their exclusion:

(a) Investigation of Physical Site Characteristics

Data must be collected that describe and define the disposal site's topography, geology, hydrogeology, and surface characteristics for the entire area where oil or hazardous materials are located or where they may migrate. Specifically, the following site characteristics shall be addressed as minimum requirements in a Phase II Study:

1. Site and locus maps. Include the scale used, property boundaries, and geographical coordinates (UTM and latitude and longitude).
2. Topography, surface drainage characteristics, and vegetation characteristics.
3. Surface water locations.
4. Flooding potential.

5. Wetlands and critical habitats.
6. Types of overburden materials and thickness; soil classification and permeability.
7. Types of bedrock and depths to bedrock.
8. Groundwater elevations; groundwater flow direction and flowrate; piezometric surfaces and hydraulic gradients.
9. Predominant wind direction, and other meteorological and dispersion parameters.
10. Other pertinent physical site characteristics.

These characteristics should be mapped, if possible, in order to determine their relationship to the extent of contamination.

(b) Definition of Source and Extent of Release and Threat of Release

At a minimum, each area of release or threat of release at or from the disposal site (including such areas as underground storage tanks, subsurface drainage or disposal systems and associated piping) identified in either a Phase I Report or through a systematic search of the site must be examined to document:

1. Location, concentrations, volume (to the extent possible) and containment (or lack thereof) of the oil and hazardous materials.
2. Source(s) of release or threat of release.
3. Existing or potential migration pathways, including all potential soil, groundwater, surface water, air, and food chain pathways.
4. Existing plume(s) of oil and hazardous materials in the groundwater, including water quality data and isopleth maps of piezometric head. The future migration of the plume should also be evaluated and a map provided, if possible, depicting existing and future plumes.
5. The magnitude of existing and potential air emissions (both vapors and particulates) from the disposal site.
6. The spatial area and concentrations of oil and hazardous material contamination in all other media (soil and surface water).

(c) Characterization of Oil and Hazardous Materials

1. The type, composition, nature, physical and chemical characteristics of oil and hazardous materials present on the disposal site must be described.
2. The environmental fate and transport characteristics of oil and hazardous materials (e.g., mobility, stability, volatility, ability and opportunity for bioaccumulation, persistence) must be described.

(d) Assessment of Risk of Harm to Health, Safety, Public Welfare and the Environment

An assessment of the risk of harm to health, safety, public welfare, and the environment posed by oil or hazardous material at or from the disposal site must be conducted as part of a Phase II study and will be based on information described above in Sections 40.545(4)(a), (4)(b), and (4)(c). This information will be used to identify and characterize the existing and potential pathways and levels of exposure to human and environmental receptors as set forth in Sections 40.545(4)(d)1. and (4)(d)2. An assessment of risks to health, safety, public welfare, and the environment will be conducted as described in Section 40.545(4)(d)3. As a minimum requirement, all federal and state standards applicable to the disposal site must be met.

An assessment of risk is a critical part of a Phase II study and must include the following elements:

1. Evaluation of Migration Pathways:

This aspect of an assessment of risk must be conducted as part of the source definition and the evaluation of the extent of the contamination as described in 310 CMR 40.545(4)(b).

2. Characterization of Exposure Potential

- a. Identify all existing or potential routes of exposure to oil or hazardous material at or from the disposal site, and all human, plant, and animal populations exposed or potentially exposed.
- b. Identify any sensitive subgroups or groups at risk that may exist within the human, plant, or animal populations exposed or potentially exposed to oil or hazardous materials at or from the disposal site;
- c. Characterize activities or conditions which are required for exposure (for example fishing or swimming);

- d. Identify any affected or potentially affected food chains;
 - e. Characterize the populations by numbers and geographic location for each exposure route.
3. Evaluation of the Risk of Harm to Health, Safety, Public Welfare, and the Environment

The information gathered in Phase II will be used to evaluate the risk of harm to health, safety, public welfare, and the environment. The process for this evaluations is still being considered by the Department. Approaches under consideration are discussed in accompanying discussion papers.

(e) Short-Term Measures:

Throughout a Phase II Study, the necessity for performing Short-Term Measures, as described in Section 40.505 should be assessed. If an imminent hazard is indicated, a Short-Term Measure must be taken immediately.

(5) Phase II Study Report:

A Phase II Study Report must include the following:

- (a) Executive Summary
- (b) Scope of Work
- (c) Summary of Phase I Study
- (d) Physical Site Description
- (e) Source(s) and Extent of Release and Threat of Release
- (f) Characterization of Oil and Hazardous Materials
- (g) Assessment of Risk to Health, Safety, Public Welfare, and the Environment
 - 1. Evaluation of Migration Pathways
 - 2. Characterization of Exposure Potential
 - 3. Determination of Significance of Risk
- (h) Conclusions
- (i) Recommendations for Future Actions
- (j) Appendices:
 - 1. Summary of data and "raw" data;
 - 2. Explanations of deviations from standard operating procedures, sampling plans, QA/QC procedures, schedule, etc.

(6) Possible Outcomes

A Phase II Study can result in any of the following actions:

- (a) Commencement of Phase III activities.
- (b) Performance of Short-Term Measures and commencement of Phase III

activities.

- (c) Documentation that no further action is necessary at the disposal site.
- (d) Conducting of confirmatory monitoring, if required.
- (e) Initiation of other studies (e.g., Health Studies).

(7) Public Involvement

- (a) For all disposal sites in Phase II, the Chief Municipal officer and the Board of Health shall receive notification of the availability of the final Phase II Study Report, correspondence reflecting major decisions, and other reports as appropriate. The notification will include information about how to obtain copies of documents. The Department will review any comments received on the Phase II work.
- (b) For Public Involvement Priority Sites, a Public Involvement Plan shall be implemented throughout Phase II. Activities undertaken shall be consistent with the Plan, but at a minimum shall include a press release for the local newspaper describing the Phase II results as well as the anticipated next steps and the opportunities for public comment.

40.546 Determination of Significant Risk: Reserved

The Department is currently considering a number of approaches for determining the level of clean up necessary to eliminate significant risk. The discussion paper entitled "Options For Evaluating Risk of Harm to Health Under M.G.L. c. 21E" describes the various approaches the Department is reviewing and is seeking public comment.

40.547 Phase III - Development of Remedial Action Alternatives and Recommendations

(1) Purpose

- (a) A Phase III Study shall identify and analyze remedial action alternatives for a disposal site and to recommend, wherever possible, feasible permanent solutions which address the primary goals of Phase III set forth below. For a priority disposal site, a Phase III Study may identify and recommend an Interim Remedial Response Action (temporary solution) if a permanent solution is not feasible within the deadlines for an Interim Remedial Response. For all disposal sites where permanent solutions are not feasible, a Phase III Study must also contain a Final Remedial Response Plan which outlines the development and implementation of a feasible permanent solution.
- (b) Primary Goals: There are three primary goals of Phase III:
 1. At priority disposal sites, a temporary solution must eliminate any substantial hazard to the health, safety, public welfare and the environment posed by oil or hazardous material at or from the disposal site.
 2. A permanent solution is sought for all disposal sites which, at a minimum, ensures attainment of a level of control of each identified substance of concern at the disposal site or in the surrounding environment such that no such substance of concern will present a significant or otherwise unacceptable risk of damage to health, safety, public welfare, or to the environment during any foreseeable period of time.
 3. Whenever feasible, a permanent remedial action shall also reduce the level of oil or hazardous materials to a level that would exist in the absence of the disposal site.

(2) Scope

M.G.L. c. 21E requires that, at a minimum, temporary solutions be implemented at priority disposal sites within four years of listing as a LTBI. If feasible, a permanent solution must be implemented within this time period. Both temporary and permanent solutions must attain the criteria which are developed through a significant risk determination described in 310 CMR §40.545. Permanent solutions must continue to meet these criteria for any foreseeable period of time. Solutions would be considered temporary if they will not continue to meet these criteria for a period of at least 15 years.

- (a) A Phase III study consists of the development and evaluation of remedial alternatives and the selection of a solution. The development

and screening of both temporary and permanent solutions must be conducted simultaneously, as it is difficult to evaluate whether an alternative represents a permanent or temporary solution prior to a full description and evaluation of the alternative. In addition, the cost-effectiveness of a permanent solution must be compared to that of a phased implementation of temporary and permanent solutions. Alternatives are developed and classified as temporary or permanent solutions in a preliminary fashion, and evaluated for their permanency in the detailed evaluation. The five steps in Phase III are as follows:

1. Development of a number of remedial action alternatives;
 2. Initial screening of alternatives for feasibility;
 3. Detailed evaluation of alternatives initially found to be feasible, including an evaluation of their permanency;
 4. Selection of a feasible alternative for priority disposal sites which is permanent, if possible. If a temporary solution is implemented, a Final Remedial Response Plan for implementing a permanent solution must be developed; and
 5. Development of a Final Remedial Response Plan for all other disposal sites within seven years of listing as LTBI, if a feasible, permanent solution is not identified.
- (b) The scope of a Phase III Study will vary by disposal site and the levels of detail and effort required will depend on the disposal site conditions. In some cases, a Phase II and Phase III Study can be performed concurrently. At some disposal sites, certain elements of a Phase III Study may not be necessary, because either adequate information is already available from previous site assessments, or because information is available on the most feasible type of alternative from previous site experience. If certain elements of a Phase III analysis are not included, a justification must be provided to the Department for their exclusion. If information is provided which is based upon previous site experience, justification must be provided which specifies how the information is applicable and relevant to the disposal site under consideration.
- (c) The Phase III Study will result in the preparation of a Phase III Report which describes the development, initial screening, detailed analysis, and the recommendation of a remedial action alternative. Where needed, it will also include a Final Remedial Response Plan.

(3) Development of Remedial Action Alternatives

- (a) Development of remedial action alternatives must be based on the data collected and analyzed in the Phase II Study and any Phase III testing (such as bench tests or pilot studies). Each remedial action alternative must address the Phase III goals by reducing the volume, toxicity or mobility of the oil or hazardous materials through source and migration control, mitigation, or reduction.
1. Source control, mitigation, or reduction remedial action alternatives must prevent or minimize migration of oil and hazardous materials from the original source by removing, stabilizing, treating, and/or containing the oil and hazardous materials.
 2. Migration control, mitigation, or reduction remedial action alternatives are necessary wherever oil or hazardous materials have migrated or may migrate from the original source.
- (b) As a minimum, alternatives which can preliminarily be considered permanent must be developed in each of the following categories for all disposal sites:
1. Removal of oil and hazardous material(s) from the disposal site and treatment or disposal of it at an off-site facility (e.g., landfill, incineration, biological, chemical, or physical treatment).

However, off-site land disposal is not a preferred permanent alternative and it should only be considered if other permanent solutions are not available or feasible. If off-site land disposal is developed as a permanent remedial action alternative, then the off-site facility must be in full compliance with all applicable federal and state regulatory requirements.
 2. On-site treatment of oil and hazardous materials either via in-situ treatment (e.g., permeable treatment beds, neutralization, bioreclamation) or via removal and treatment on-site (e.g., incineration, ground water treatment).
 3. Combinations of the above.
- (c) Permanent solutions should be considered that incorporate innovative or alternative technologies for such aspects as the recycling, reuse, destruction, or permanent containment or immobilization of oil and hazardous materials, as well as technologies that promote energy recovery.
- (d) For priority disposal sites, alternatives that are preliminarily considered temporary must be developed in each of the following categories, at a minimum:

1. Containment of oil and hazardous materials at the disposal site (e.g., capping, groundwater contaminant barrier wells, gas barriers, etc.), and continued on-site monitoring to identify potential continued migration or releases.
2. Partial removal of oil and hazardous materials from the disposal site for land disposal at another location. This alternative shall only be considered if there are no other feasible temporary solutions.
3. Elimination of exposure (e.g., relocation of nearby residents, provision of alternative water supplies, etc.)
4. Combinations of the above.

(e) In addition, the alternative of taking no remedial action must be considered in the initial screening at all disposal sites.

(4) Criteria for Initial Screening of Alternatives

The remedial action alternatives must be initially screened to narrow the field of alternatives to the permanent and temporary solutions that are feasible. A brief description of each alternative must be provided in the Phase III report, as well as a justification for each alternative rejected based on the initial screening. At least two permanent remedial action alternatives must remain after initial screening. M.G.L. c. 21E §3A(h) specifies criteria for feasibility of remedial action alternatives. The following criteria incorporate the statutory considerations and will be used to perform initial screening:

- (a) Technical Considerations. Remedial action alternatives should be eliminated which are clearly precluded by practical considerations such as:
1. Site characteristics, (e.g., topography, depth to bedrock, stratigraphy, piezometric surface(s), extent of contamination, site configuration, etc.);
 2. Logistics of implementing the alternative (e.g., site accessibility, magnitude of remedial action, presence of utilities, transportation constraints, weather conditions, time requirements);
 3. Reliability of alternative's technology, (e.g., technologies that are unreliable, perform poorly, or have inherent construction, operation, and maintenance problems, etc.);
 4. Lack of availability of individuals with the expertise needed to effectively implement the alternative; and

5. Lack of availability of an off-site facility for land disposal that is in full compliance with all applicable federal and state regulatory requirements.

(b) Effectiveness (Benefits). The initial screening of alternatives must include a preliminary evaluation of the expected benefits to be gained from implementing each alternative in terms of health, safety, public welfare and the environment. Remedial action alternatives shall be eliminated which would clearly not attain the criteria developed in the significant risk determination as described in Section 40.545.

(c) Costs

In the initial screening, limited information will be available regarding the expected costs of the proposed alternatives. The Phase III report must include estimates of both capital and operation costs and/or unit costs. Alternatives that are expected to cost substantially more without achieving greater benefits (effectiveness) can be eliminated in the initial screening.

(5) Detailed Evaluation of Alternatives

The initial screening of alternatives will eliminate alternatives that are clearly not feasible. The remaining alternatives must be described in detail in the Phase III report. A timetable must be developed for the design and construction phases, as well as the operation and maintenance phases, for all remaining alternatives. In addition, required federal, state and local permits and approvals must be identified. The alternatives will be evaluated again using the feasibility criteria used in the initial screen. The analysis must consider the more detailed description of the alternative and provide a description of the results of the detailed evaluation in the Phase III report. A major component of the detailed evaluation is a consideration of the permanency of the alternatives.

(a) Technical Considerations. The technical feasibility of each remaining alternative must be evaluated. This analysis should include, but is not limited to, a more detailed evaluation of all technical considerations specified for the initial screening.

(b) Effectiveness and Permanency (Benefits). The effectiveness of each remaining alternative must be addressed through a consideration of the following factors:

1. Achievement of whatever criteria have been developed in a significant risk determination as set forth in Phase II: Section 40.545; the type of criteria will depend on the risk assessment approach taken in Phase II.

2. Potential deterioration of technology or projected useful life of proposed alternative.
 3. Evaluation of the risk associated with future potential releases of oil or hazardous materials that remain on site after remediation, taking into account the reasonably foreseeable future land use of the disposal site and the surrounding environment. A permanent solution must continue to eliminate significant risk (as defined by criteria determined in Phase II) for the foreseeable future.
 4. Estimation of the risk associated with the implementation of the remedial action alternative including short-term and long-term threats to worker safety, nearby human populations, and the environment.
 5. Time required to achieve a specified level of clean-up.
 6. Achievement of levels of oil and hazardous materials that would have existed in the absence of the disposal site.
- (c) Cost. The present worth costs of each remedial action alternative shall be calculated based on the expected duration of the proposed alternative. Analysis of present worth costs must include capital costs as well as operation and maintenance costs over the expected duration of implementation, operation and monitoring.
1. Capital cost calculation should address the following, where appropriate:
 - a. Costs of relocating nearby inhabitants and living expenses during relocation;
 - b. Costs of providing alternative water supplies, if needed;
 - c. Costs of acquiring land or easements;
 - d. Land and disposal site development costs;
 - e. Costs of buildings and services;
 - f. Equipment costs including replacements;
 - g. Disposal costs;
 - h. Engineering design expenses;
 - i. Construction expenses;
 - j. Costs of acquiring federal, state and local licenses and permits;
 - k. Start-up and shut-down costs;
 - l. Costs of anticipated monitoring and health and safety requirements during construction;
 - m. Revenues from sale of removed materials;
 - n. Revenues from sales of salvaged equipment and/or buildings;
 - o. Expenses for restoring the disposal site; and
 - p. Contingency allowances.

2. Operation and Maintenance Cost calculation should address the following over the expected duration of operation and monitoring:
 - a. Operating labor costs;
 - b. Maintenance materials and labor costs;
 - c. Disposal costs;
 - d. Costs of auxiliary materials and energy;
 - e. Monitoring costs;
 - f. Purchased service costs;
 - g. Administrative costs;
 - h. Insurance and taxes;
 - i. A maintenance reserve and contingency fund; and
 - j. Revenues from sale of removed materials.

(6) Selection of a Solution

- (a) The Phase III Study and subsequent Report shall include a recommendation and justification for the proposed remedial action. This justification must demonstrate that implementation of the proposed remedial action will achieve the criteria for the elimination of significant risk described in Section 40.545.
- (b) The Department will select a solution based on the Phase III report, and other information available to the Department.
- (c) The selected solution must be one that is found to be feasible, permanent, and more cost-effective than a phased temporary-permanent solution. If such an alternative is identified, the permanent solution must be implemented within the specified time frames for priority disposal sites. If no feasible permanent alternatives exist, then the most cost-effective temporary solution shall be selected for priority disposal sites.
- (d) Alternatives may be eliminated if they are substantially more expensive and provide no greater reduction in risk to health, safety, public welfare or the environment than other alternatives. Alternatives that are more expensive but offer substantially greater environmental and/or health benefits should not be eliminated if the increased costs can be justified by the increased benefits.
- (e) A combination of permanent and temporary remedial action alternatives may be selected as the recommended remedial action for priority disposal sites. Any portions of the priority disposal site for which a temporary remedial action alternative is implemented must adhere to the conditions set forth in Section (7) below.
- (f) In selecting the appropriate remedial action, the Department will consider the Phase III goals and the extent to which these goals will be achieved, as described in the detailed evaluation of alternatives,

as well as any other practical and legal requirements and public concerns.

(7) Requirements of Temporary Solutions

Any temporary solution implemented at a priority disposal site must adhere to the following conditions:

- (a) Any alternative must have a design life of a minimum of 15 years unless a schedule is developed in the Final Remedial Response Plan 310 CMR 40.547(8) which ensures the implementation of a permanent solution within 15 years. In such situations, the design life of the temporary solution may have an appropriately shorter design life.
- (b) Appropriate monitoring systems shall be installed at any priority disposal site where a temporary solution has been implemented to monitor the effectiveness of the temporary solution.
- (c) Whenever temporary solutions initially taken at a priority disposal site do not completely eliminate the substantial hazard to the public health, safety, and welfare or to the environment, additional temporary solutions must be implemented as soon as they become feasible.
- (d) All temporary solutions that are implemented shall be designed to facilitate or not preclude permanent solutions.
- (e) A Final Remedial Response Plan must be prepared for priority disposal sites where temporary solutions have been implemented, as part of the Phase III Study and Report (Section (8)).

(8) Final Remedial Response Plan

- (a) Whenever no feasible permanent solutions are found for a disposal site, a Final Remedial Response Plan must be prepared as part of the Phase III Study and Report.
- (b) The Plan must include a description of specific activities or steps, as well as a time schedule, to be taken either by the Department or other specified persons to identify, develop, and implement a permanent solution at the disposal site.
- (c) These activities can include, but are not limited to:
 - 1. Performing pilot tests, bench studies, or other field studies.
 - 2. Investigating other technologies or alternatives.
 - 3. Training or recruiting appropriate personnel to acquire the needed expertise.

4. Searching for innovative ways to reduce the costs or the risks of implementing a specific alternative.
 5. Developing new technologies to achieve the Phase III goals.
- (d) If a temporary solution is to be implemented at the priority disposal site, the Plan shall include a description of activities to be taken and their time schedule to ensure that the temporary solutions are operational and effective until a permanent solution can be implemented.

(9) Public Involvement

- (a) For all disposal sites in Phase III, the Chief Municipal Officer, and the Board of Health shall receive notification of the availability of the final Phase III Study report, correspondence reflecting major decisions, and other reports as appropriate. The notification will include information about how to obtain copies of all documents. The Department will review any comments received on the Phase III work.
- (b) For Public Involvement Priority Sites, the Public Involvement Plan will be implemented throughout Phase III. Activities undertaken shall be consistent with the plan, but at a minimum would include a press release for the local newspaper describing the Phase III results as well as the anticipated next steps and the opportunities for public comment.

40.548 Phase IV - Implementation of Remedial Actions

(1) Purpose

- (a) Phase IV activities are intended to implement the solution selected in Phase III, and include design, construction, and operation stages.
- (b) Primary Goal: The goal of Phase IV is to design, construct, and operate the selected solution in such a manner that the goals of the solution as described in Phase III are achieved.

(2) Scope

Phase IV encompasses all aspects of implementing a selected solution, including the engineering design activities, construction activities, and overall initial operation of the solution.

The concept for a Phase IV project is determined when a solution is selected at the end of a Phase III Study. This concept must be developed into a detailed design in Phase IV. Engineering design activities must include a preliminary and final design, at a minimum. In addition, intermediate design plans or progress reports may be required by the Department. Construction activities revolve around the actual construction phase of the solution and include such requirements as on-site inspectors, "as built" plans, and initial startup and testing.

Phase IV also includes, where appropriate, the actual operation of the solution. This may include operator training, health and safety plan implementation, operation and maintenance of equipment, and monitoring.

All design work and construction and operation documentation must be certified in accordance to Subpart A 40.011 requirements of these regulations. Additionally, a Professional Engineer's stamp will be required for specific documents as specified in this section.

(3) Engineering Design Activities

- (a) All necessary permits, approvals and site access agreements, if any, were identified in Phase III. Prompt action should be taken to obtain the required permits, approvals, and site access agreements in order to avoid delays in implementing the remedial action. The PRP shall be responsible for obtaining any necessary environmental and non-environmental construction permits and approvals (i.e., discharge permits, building permits, electrical permits, etc.), if they are conducting the Phase IV work.

(b) Minimum Requirements

A preliminary and a final design of the selected remedial action must be completed as part of the Phase IV engineering design activities. If these activities are conducted by the PRP, they must be submitted to the Department.

1. Preliminary Design. A preliminary design shall be performed at the beginning of the design stage. If PRPs are conducting the work, the preliminary design should be submitted to the Department to ensure that all necessary elements are included in the specifications and that it will achieve full compliance with requirements and goals of Phase III. Review of the preliminary design by the Department is important to correct or modify any problem areas before extensive design work is completed. All comments provided by the Department must be incorporated into the Final Design.

The preliminary design shall be stamped by a Professional Engineer(s) who has applicable expertise in the areas presented.

The preliminary design shall be a detailed conceptual design that includes specification of the following:

- a. location of disposal site;
 - b. overall conceptual design, including design criteria and rationale, and process diagrams (with appropriate dimensions and specifications);
 - c. projected design life;
 - d. area(s) of the disposal site involved in the remedial action including preliminary layouts;
 - e. construction materials and equipment (with their specifications) to be used;
 - f. special technical problems;
 - g. any additional engineering data required;
 - h. permits and regulatory requirements;
 - i. access, easements, rights-of-way;
 - j. public involvement activities;
 - k. monitoring equipment, location(s), and frequency;
 - l. health and safety plan;
 - m. contingency plans, if appropriate;
 - n. capital and operation and maintenance costs; and
 - o. project schedule (including design, construction, permits and access).
2. Final Design. The final design shall consist of the final design plans and specifications, construction cost estimate, financial assurances for construction, project schedule, Quality Assurance/Quality Control Project Plan, Health and Safety Plan, and draft implementation and operation plan. The final design must be

stamped by a Professional Engineer who has applicable expertise in the areas presented.

If the final design is prepared by a PRP, it must be submitted to Department for approval. The Department will consider the following in reviewing the submittal:

- a. Consistency with the Phase III goals;
- b. General completeness of the final design plans and specifications;
- c. The accuracy of the construction cost estimate (these cost estimates must be specifically certified by a Professional Engineer;
- d. The accuracy of any estimated quantities of materials specified in the design;
- e. The feasibility of constructing the remedial action by utilizing currently accepted construction practices and techniques;
- f. The length of the remedial action's design life (including that of particular materials specified) and the reliability of the remedial action over its design life;
- g. The utilization of currently accepted environmental control measures and technology and/or utilization of demonstrated, innovative alternative technologies;
- h. The adequacy of the Quality Assurance/Quality Control and Health and Safety Plans;
- i. The adequacy of backup systems and safety controls;
- j. The monitoring requirements (including locations and frequency); and
- k. The general completeness and adequacy of the implementation and operation plan.

(c) Interim Submittals

At the discretion of the Department, additional submittals may be required whenever the complexity or nature of the disposal site requires a complicated or extensive remedial action; particularly if the selected solution requires bench studies or pilot tests. These additional requirements will be specified by the Department at the beginning of Phase IV and can include a draft final design and/or intermediate design/progress reports.

(4) Construction Activities

(a) Records and Reports

All records and reports developed during Phase IV must be adequately documented since they will be used in the final certification of a remedial action.

(b) Resident Engineer Oversight

1. During all on-site construction activities conducted by the PRP, the PRP will provide a resident engineer with expertise in environmental construction projects and proceedings. The amount of time the resident engineer is present at the disposal site should be commensurate with the complexity and nature of the disposal site and the remedial action. For large sites or complex projects, additional on-site engineers may be required.
2. The resident engineer should verify compliance with all requirements identified in the final design. The resident engineer shall be authorized to stop all activities not in compliance, or which endanger the health, safety, and welfare of on-site personnel or surrounding residents.
3. The resident engineer shall review all daily logs, progress reports, and construction activities to verify that all work is in compliance with all design requirements and shall note and resolve all discrepancies immediately. The resident engineer shall review all reports (daily, weekly, and monthly, etc.) and initial each. All comments on these reports should be noted in the resident engineer's daily log.

(c) The Department's Inspections

The Department may send any appropriate personnel to a disposal site at any time to monitor and verify compliance with all of the requirements identified in the final design. Such personnel are authorized to:

1. Halt any work which threatens the health, safety, public welfare, or the environment;
2. Stop all activities which are not in compliance with the final design;
3. Require that specific corrective actions be taken in order to protect health, safety, public welfare, or the environment and/or to bring the project into compliance with the final design;
4. Review all records, reports or other documentation kept on the project; and
5. Inspect and monitor all activities associated with the construction stage of Phase IV.

6. Take any other action necessary to monitor or verify compliance of construction with the final design.

(d) Final Inspection and Closeout

1. Prefinal Construction Conference. As the project nears completion, a conference between the PRP and the Department may be required, if the PRP is conducting the work. The objective of the conference is to discuss procedures and requirements for project completion and closeout.

A list of items to be covered at the conference includes, but is not limited to:

- a. Final implementation and operation plan submission;
 - b. Final "as built" plans submission;
 - c. Cleanup responsibilities;
 - d. Demobilization activities;
 - e. Security requirements for project transfer;
 - f. Prefinal inspection schedule;
 - g. Facility start-up and testing; and
 - h. Operator training.
2. Prefinal Inspection. The prefinal inspection will consist of a walk-through inspection of the entire project site to determine whether the project is complete and consistent with the design documents and the chosen remedial action. Any outstanding construction items discovered during the inspection should be identified. Additionally, treatment equipment shall have been operationally tested by the contractor. The contractor shall certify that the equipment has performed to meet the purpose and the intent of the specifications. At the request of the Department, it may be necessary to notify the Department prior to testing, so that the Department can verify the proper operation of the equipment. Retesting must be successfully completed wherever deficiencies are revealed.

Upon completion of the prefinal inspection, a prefinal inspection report shall be prepared. It should outline incomplete construction items, actions required to resolve these items, completion date(s), and a date for final inspection.

3. Final Inspection and Certification. Upon completion of all construction items, a final inspection will be conducted. The final inspection will consist of a walk-through inspection of the disposal site. The prefinal inspection report shall be used as a checklist with the inspection focusing on the incomplete construction items identified in the prefinal inspection. The

contractor's demobilization activities should be completed, except for equipment and materials required to finish incomplete construction items at the time of inspection. The contractor shall certify that incomplete items have been finished. If any items are still unresolved, the inspection shall be considered a prefinal inspection and another prefinal inspection report will be required.

Upon satisfactory completion of the final inspection, a final inspection report must be submitted to the Department, which briefly describes the incomplete construction items from the prefinal inspection, indicate that the items are satisfactorily resolved, and certifies that the project is complete and consistent with the design documents and the goals of the Phase III Study.

(5) Implementation and Operational Activities

(a) Implementation and operational activities include, but are not limited to the following:

1. Operation and Maintenance Plan;
2. Operator Training;
3. Health and Safety Plan; and
4. Monitoring Requirements.

(b) Operation and Maintenance Plan

In most instances, remedial activities will result in a need for varying degrees of operational and maintenance (O&M) activity associated with the completion of a project. The Phase III Study will indicate the types of O&M activities required and provide a cost estimate. The preliminary design will provide more detail on the type and nature of O&M activities required, a cost estimate, and an identification of the party to be conducting O&M. To ensure correlation of the separate but related phases of design and O&M, a draft O&M plan must be completed simultaneously with the final design document. The O&M plan shall be finalized before the prefinal construction inspection.

An O&M plan should consist of the following items, as appropriate:

1. Description of Normal Operation and Maintenance
 - a. Description of tasks for operation
 - b. Description of tasks for maintenance
 - c. Description of prescribed treatment or operating conditions
 - d. Schedule showing frequency of each O&M task

2. Description of Potential Operating Problems
 - a. Description and analysis of potential operating problems
 - b. Sources of information regarding problems
 - c. Common remedies
 - d. Notification procedures, timing, and action to be taken if a failure is identified
3. Description of Routine Monitoring and Laboratory Testing
 - a. Description of monitoring tasks
 - b. Description of required laboratory tests and their interpretation
 - c. Required QA/QC
 - d. Schedule of monitoring frequency and when, if so provided, to discontinue
4. Description of Alternate O&M
 - a. Should systems fail, alternate procedures to prevent undue hazard
 - b. Analysis of vulnerability and additional resource requirements should a failure occur
5. Safety Plan
 - a. Description of precautions, of necessary equipment, etc., for site personnel
 - b. Safety tasks required in event of systems failure (may be linked to site safety plan developed during remedial responses)
6. Description of Equipment
 - a. Equipment necessary for O&M
 - b. Installation of monitoring components
 - c. Maintenance of site equipment
 - d. Replacement schedule for equipment and installed components
7. O&M Annual Budget which should include but not be limited to the following:
 - a. Cost of personnel
 - b. Costs of preventive and corrective maintenance
 - c. Costs of equipment, supplies, etc.
 - d. Cost of any contractual obligation (e.g., lab expenses)
 - e. Costs of operation (e.g., energy costs, etc.)

8. Records and Reporting Mechanisms Required

- a. Daily Operating Logs
- b. Laboratory Records
- c. Records for Operating Costs
- d. Mechanism for reporting emergencies
- e. Personnel training and maintenance records
- f. Monthly/Annual Reports to State agencies

(6) Public Involvement

- (a) For all disposal sites in Phase IV, the Chief Municipal Officer and Board of Health, in the affected community(ies) will receive notification of the availability of the final Phase IV reports (including design plans and specification). The notification will include information about how to obtain copies of documents.
- (b) The Public Involvement Plan will be implemented for Public Involvement Priority Sites. Activities undertaken will be consistent with the plan, but at a minimum would include a press release for the local newspaper describing the design and any local impact issues, as well as the completion of steps and the opportunities for public comment.
- (c) Prior to, during and upon implementation, of Phase IV field work, the public involvement activities identified in 40.452(8) shall be implemented.

40.549 Phase V - Post Closure: Reserved

(40.550-40.599: Reserved)

SUBPART E COST RECOVERY

40.600 Recovery of Costs and for Damages to Natural Resources

(1) 310 CMR 40.600 through 40.699, cited collectively as 310 CMR 40.600, describe the costs and damages which are recoverable by the Commonwealth from liable parties and the means for recovery thereof under M.G.L. c. 21E and this Contingency Plan. This Subpart is intended to ensure recovery by the Department on behalf of the Commonwealth of all costs, direct and administrative, associated with response actions performed under authority of M.G.L. c. 21E and the Massachusetts Contingency Plan. The regulations apply to every situation in which the Department identifies a release or threat of release of oil or hazardous material and incurs costs in performing response actions or in which the Department identifies some damage to natural resources resulting from a release of oil or hazardous material to the environment.

(2) The provisions of 40.610 through 40.619 apply primarily to releases or threats of releases for which one or more potentially responsible parties have agreed to conduct response actions in accordance with this Contingency Plan. The provisions of 40.620 through 40.629 apply primarily to releases and threats of release to which the Department responds through its own employees and agents because no potentially responsible party has been identified or has agreed to perform or pay for the necessary response actions.

40.601 General Provisions

(1) The Department shall collect and maintain documentation of actions taken by the Department under authority of M.G.L. c. 21E and the Massachusetts Contingency Plan. This documentation shall form the basis for recovery of the Commonwealth's costs and for actions to recover for damage to natural resources. The circumstances of every release or threat of release which is the subject of a response action shall be compiled and maintained in separate files which contain a description of response actions undertaken, potentially responsible parties identified, an accounting of costs incurred by the Department, and of actual or potential impacts on public health, safety, welfare and the environment caused by the release or threat of release.

(2) Interagency and interdepartmental agreements may be signed to ensure that state resources will be available to respond to a release or threat of release under this Contingency Plan. This Contingency Plan intends that state agencies and Departmental divisions will make resources available or participate in responses to releases under existing programs. Costs incurred by an agency or a division of the Department other than the Division of Hazardous Waste shall be recoverable under these regulations provided they are incurred in actions performed consistent with M.G.L. c. 21E and this Contingency Plan.

(3) Quantification of costs incurred by the Department in undertaking response actions under the Massachusetts Contingency Plan may include: expenditures

for equipment, contractors and disposal; analytical, technical and scientific assessment expenditures attributable to a specific site; costs of conducting public participation activities; costs of overseeing PRP-conducted response actions and direct and indirect Department employee and overhead costs which can be apportioned, accounted or established as an average cost of response to a release or threat of release in accordance with these regulations.

(4) The Commonwealth's right to recover for damages to natural resources is additive to its right to recover costs incurred in performing response actions. However, if the performance of response action completely redresses all damages to natural resources caused by the release or threat of release and the Commonwealth recovers all of its costs, there shall be no recovery for damages to natural resources.

40.602 Cost Recovery or Damage Actions By Other Persons

(1) M.G.L. c. 21E, §4 provides that any person who performs response actions consistent with this Contingency Plan may recover against any other person responsible for the release or threat of release necessitating the response action.

(2) M.G.L. c. 21E §5(a)(5)(iii) provides that any person whose real or personal property has been damaged by a release or threat of release shall have a cause of action against any potentially responsible party as enumerated in §5(a).

(3) Neither this Subpart nor the Contingency Plan is intended to provide for the recovery of costs or damages by persons enumerated in (1) and (2) above against any other person.

(4) No person who performs response actions in accordance with this Contingency Plan or the directions of the Department shall have a cause of action against the Department or the Commonwealth of Massachusetts for recovery of costs or damages unless the Department or the Commonwealth is a person identified in M.G.L. c. 21E §5 with regards to the release or threat of release which is the subject of the response action.

(40.603-40.609: Reserved)

40.610 Department Oversight Costs

The provisions of 310 CMR 40.610 through 40.619 apply to potentially responsible parties who elect to perform response actions in accordance with the Massachusetts Contingency Plan. They are intended to assure the Department's recovery of all costs incurred in monitoring consistency of actions performed by potentially responsible parties with this Contingency Plan. Departmental oversight costs are in addition to costs incurred directly by potentially responsible parties in performing response actions.

40.611 Calculation of Departmental Oversight Costs

(1) The costs which the Department incurs in overseeing potentially responsible party-conducted response actions under this Contingency Plan are recoverable response action costs.

(2) The Department may develop standardized methods for calculating the indirect overhead and direct employee costs incurred in overseeing response actions performed by potentially responsible parties. Calculation of such costs shall reflect the relative degree and level of Departmental oversight required in overseeing privately-funded response actions of various complexities.

(3) The Department may alternatively elect to recover its actual oversight costs incurred in overseeing response actions in accordance with the provisions of 310 CMR 40.620(1).

40.620 Recovery of Costs Incurred By The Department In Performing Response Actions

Costs incurred by the Department in responding to releases and threats of release are recoverable by the Commonwealth as set forth below:

(1) Expenses and monetary value of time spent by Department agents and employees who perform response actions related to a release or threat of release under M.G.L. c. 21E or other consistent authority are recoverable response action costs. This includes all monies paid by the Department to its agents and contractors for their performance of response actions. The Department shall maintain records of monies paid to contractors by specific job or site.

(2) The expenses of conducting public participation activities required by M.G.L. c. 21E §14 are recoverable response action costs.

(3) The Department shall develop criteria for accurately calculating the overhead costs associated with the Department's performance of response actions. These estimates shall include the time cost of: conducting site visits, preparing correspondence and other documentation, reviewing reports, formulating response action plans consistent with this Contingency Plan, and contractor oversight. These calculations shall reflect the relative level of Departmental effort required to perform response actions of varying complexity and magnitude. Calculated overhead costs are recoverable under this subsection if the Department elects not to recover actual personnel costs as set forth in subparagraph (1).

(40.621-40.629: Reserved)

40.630 Cost Recovery and Enforcement

310 CMR 40.630 through 40.641 describes the procedures whereby the Department may recover its costs from potentially responsible parties through administrative and judicial means.

40.631 Documentation

Documentation relied upon by the Department in deciding to perform response actions consistent with this Contingency Plan and in calculating costs and damages for which potentially responsible parties may be liable shall be made available to potentially responsible parties upon request. Nothing in this section shall be interpreted to require the Department to make available information which is enforcement sensitive or otherwise exempt from disclosure under M.G.L. c. 4 §7.

40.632 Demand For Payment

(1) The Department shall make a written demand for payment upon potentially responsible parties to initiate administrative cost recovery. The Department may initiate administrative cost recovery against a potentially responsible party at any time after it has identified that expenditures described in this subpart may be necessary or that damages to natural resources have been identified. Once a demand has been made, liability owed by potentially responsible parties for response actions performed or conducted by the Department shall be considered an uncollected debt.

(2) Nothing in this section shall prevent the Department from seeking judicial relief, including equitable remedies, against potentially responsible parties whenever it has identified a release or threat of release of oil or hazardous material which poses a significant or otherwise unacceptable risk.

40.633 Interest Calculation

Interest on an uncollected debt shall be assessed at a rate of one percent per month or twelve percent per year pursuant to M.G.L. c. 21E §13. The cumulative interest owed to the Commonwealth on the debt shall be compounded annually until the debt is paid or otherwise resolved.

40.634 Lien Placement

The Department may file a lien or a priority lien against the property of a responsible party in accordance with the provisions of M.G.L. c. 21E §13. The Department shall provide potentially responsible parties with notice of the filing of a lien or priority lien against a property.

40.635 Negotiation and Mediation

The Department may enter into negotiations with potentially responsible parties for the payment of an uncollected debt. These discussions may include but are not limited to: an analysis of the costs constituting the debt, the existence of other potentially responsible parties, a consideration of possible defenses the potentially responsible parties may possess, and factual circumstances underlying the release or threat of release and response actions thereto.

40.636 Judicial Referral and Other Relief

The Department may request the Attorney General to bring an action to recover all costs incurred by the Department in performing or overseeing a response action at any time after it has incurred costs. The Department may also seek injunctive relief or compliance with these regulations, M.G.L. c. 21E, or orders or consent orders issued thereunder at any time.

40.637 Treble Damages

In accordance with the provisions of M.G.L. c. 21E §5(e), the Department may seek to recover from a potentially responsible party up to three times the total costs incurred in Departmental response actions through administrative or judicial action.

40.638 Method of Payment: Reserved

40.639 Payment Directly to Department Contractors: Reserved

40.640 Acknowledgment of Receipt of Payment: Reserved

40.641 Form and Extent of Release

Whenever the Department receives payment of its response costs from a potentially responsible party, either in full or under the terms of a negotiated administrative settlement or judicial settlement or judgment, it shall provide the potentially responsible party with a limited release from liability under M.G.L. c. 21E §5. Said release shall not release a potentially responsible party from: liability for damages to natural resources, liability for costs which the Department may incur after the date of the release, liability for costs associated with conditions at a site existing but unknown at the time the release is executed unless expressly set forth therein, or other limitations set forth therein.

(40.642-40.649: Reserved)

40.650 Recovery for Damages to Natural Resources: Reserved

SUBPART F: TECHNICAL ASSISTANCE GRANTS

40.700 Technical Assistance Grants

This subpart contains regulations specifying the terms and conditions of eligibility for and use of technical assistance grants to groups of individuals who may be affected by oil or hazardous materials from any disposal site.

40.701 Authority and Purpose

(1) M.G.L. c. 21E, § 14(c) authorizes the Department of Environmental Quality Engineering to provide for limited grants to be given to groups of individuals who may be affected by oil or hazardous materials from any disposal site.

(2) The purpose of the technical assistance grants program is to assist affected individuals by providing them with access to expert advice and technical assistance in order to:

- (a) encourage affected individuals to acquire and make use of information which will enable them to participate more effectively in the site remediation process; and
- (b) allow affected individuals to address issues of concern related to the disposal site.

(3) These regulations establish the criteria and procedures for the award of technical assistance grants to applicant groups.

40.702 Definitions

(1) Applicant Group: Any group of affected individuals which applies for a grant pursuant to these regulations.

(2) Affected Individual: Any individual who experiences or may experience significant environmental, health, or economic impacts as a result of a disposal site.

(3) Grant: Technical Assistance Grant authorized by M.G.L. c. 21E, §14(c).

(4) Grantee: An applicant group which has been awarded a grant pursuant to 310 CMR 40.708(7).

40.703 Applicability

(1) Grants shall be made available to applicant groups subject to these regulations and to the availability of funding.

(2) For each disposal site, there shall be no more than one grant available per funding round.

(3) On an annual basis, the Department shall designate a maximum amount for any single grant which shall apply to both funding rounds referred to in 310 CMR 40.707, in a given year. Said maximum amount shall be set forth in the notice to be published by the Department pursuant to section 310 CMR 40.706. For the first year of the technical assistance grant program, the designated amount for any single grant shall be \$10,000.

(4) Any other source of funding obtained by an applicant group for expert advice or technical assistance shall not be subtracted from any specified grant maximum designated by the Department provided the total of grant funds received by the grantee from all sources shall not exceed 100% of the total cost of the proposed project.

40.704 Eligible Applicant Groups

(1) Any group of affected individuals such as a non-profit corporation or a partnership which is legally authorized to accept funds from the Department shall be eligible to apply for a grant.

(2) Any group which restricts the meaningful participation and involvement of affected individuals in the group shall be ineligible to apply for a grant.

40.705 Eligible Projects

(1) Eligible projects for grants shall include but are not limited to:

(a) Interpretation, review and/or critique of technical analyses related to a disposal site as presented in reports developed by or on behalf of the Department or potentially responsible parties or by other public or private entities. Such reports shall include but not be limited to:

1. workplans for studies of disposal sites, including Phase II (Full Evaluation), Phase III (Development of Remedial Action Alternatives), Phase IV (Implementation of Remedial Actions), and Phase V (Post-Closure);
2. specific plans for environmental testing and analysis; and
3. reports summarizing the results of such plans.

(b) Legal advice, analysis, and/or development of strategy concerning citizen rights in c. 21E response actions.

(c) Public education activities.

(2) The following activities shall be ineligible for grant funds:

- a. Development of original field and/or testing data.
- b. organizational development or membership building.
- c. Litigation or any other adversarial proceeding.
- d. Partisan political activity or any activity to further the election or defeat of any candidate for public office.

40.706 Notice Provisions

(1) On a semi-annual basis, the Department shall publish a notice in the Massachusetts Register and the MEPA Monitor, announcing the availability of grants for each funding round. Said notice shall contain at a minimum:

- (a) A description of eligible applicant groups and eligible projects as referred to in 310 CMR 40.704 and 310 CMR 40.705.
- (b) The designated maximum amount for any grant.
- (c) The place or places from which grant applications may be obtained.

(2) The information listed in subsection (1) of this section shall also be published by the Department through the following means:

- (a) With the quarterly lists of confirmed disposal sites and locations to be investigated published pursuant to M.G.L. c. 21E, §3(b).
- (b) As part of the notice published at the conclusion of Phase I at each disposal site, pursuant to M.G.L. c. 21E, §14(a).

40.707 Grant Application Process

Grant applications shall be received and evaluated by the Department in accordance with the following procedures.

(1) Application Period. To disburse funds available for grants, the Department shall establish two funding rounds in each year during which grant applications may be submitted, and will be reviewed and awarded or denied funding. Within each funding round the Department shall establish an application period of forty (40) days during which applications will be accepted for consideration. The Department may extend said application periods at its discretion. The Department shall provide notice of said application periods pursuant to 310 CMR 40.706.

(2) Application Deadline. Applications received after the due dates set by the Department for a given funding round shall not be considered for a grant.

(3) Application Forms. Grant applications shall be submitted on grant application forms provided by the Department together with any other documentation required by the Department.

(4) Grant Application - Part I. Any applicant group applying for a grant shall submit Part I of the Technical Assistance Grant Application which shall include the following information:

(a) Description of Applicant group.

1. Name of applicant group.
2. Name and telephone number(s) of person(s) who shall act as contact persons for the applicant group.
3. Identification of the disposal site to be investigated.
4. Description of applicant group including proof of its legal authorization to accept funds from the Department; its structure; its by-laws, if any; and its current membership list.
5. If not identified in subsection (4) of this section, a list of all relevant affiliations of members of the applicant group.
6. Description of applicant group's efforts to represent all individuals affected by the identified disposal site.
7. Description of the known range of environmental, health and economic impacts of the identified disposal site.
8. Description of the degree to which the applicant group represents the environmental, health and economic interests of individuals affected by the identified disposal site.
9. Description of applicant group's history and experience, if any, in conducting activities similar to those proposed in the application.

(b) Description of Project

1. Description of project including activities to be conducted, issues to be addressed, and the overall goal of the project.
2. Nature of technical assistance to be obtained, including identification of the qualifications of the expert(s) to be hired.
3. A description of the means by which the results or products of the applicant group's project will be disseminated and an

identification of the audience of affected individuals which is to receive such information.

4. If the applicant group has ever received a grant or grants under this technical assistance grants program, a description of:
 - a. The relationship between any incomplete or unfinished project or projects for which said grant funds were received and the project for which the applicant group is currently applying for a grant.
 - b. The amount of any unexpended grant funds to which the applicant group is entitled and the services for which those grant funds are to be spent.
5. If the total cost of the applicant group's project exceeds the designated grant maximum referred to in 310 CMR 40.703, an identification of the amount and the sources of any and all additional funding which have been secured by the applicant group.

(5) Part I Application Due Date and Publication of Part I List

Within each funding round, the Department shall designate a date by which all Part I Applications shall become due. Within a reasonable time after this date, the Department shall publish a list of all Part I Applications submitted up to said date. Said list shall be published in the MEPA Monitor, in a newspaper or newspapers which circulate to communities which may be affected by oil or hazardous materials from the disposal sites identified on said list, and shall also be mailed to every contact person for each applicant group whose name appears on said list. To facilitate the development of applicant groups which broadly represent the interests of affected individuals, the Department shall publish a notice with said list stating that affected individuals interested in involvement in any technical assistance grant proposal or project identified on said list may contact the group(s) applying for said grant.

(6) Grant Application - Part II

Any applicant group applying for a grant shall submit Part II of the Technical Assistance Grant Application which shall include the following information:

- (a) A copy and description of the applicant group's proposed workplan and a schedule for completing the workplan.
- (b) Information and documentation describing the background and qualifications of any and all consultants to be employed by the applicant group.
- (c) Description of the applicant group's procedures for supervision and accountability of experts and for management of grant-funded activities.

- (d) Description of the applicant group's procedures for financial management and accounting of grant funds.

(7) Part II Application Due Date

The Department shall establish a date by which all Part II Applications must be submitted to the Department.

(8) Certification of Applications

The Department shall review both Part I and Part II of each application to determine the completeness of the information contained therein. Upon completion of its review of each application the Department shall certify in writing that the application is complete or incomplete and include the date of such certification and shall so notify the applicant group. In the case of an incomplete application, the Department shall set forth the inadequacies of the application through a notice to the applicant group which shall also specify a date by which such inadequacies must have been corrected and received by the Department. When the inadequacies in the application have been corrected by the applicant, the Department may then certify the application as complete. No application which is not certified as complete may be considered for a grant.

40.708: Grantee Selection Process

Grant application forms which have been certified as complete shall be evaluated according to the criteria listed below. Each individual criterion shall be rated according to the following rating system:

(1) Evaluation Criteria

(a) Capability of Applicant Group (maximum - 9 points).

1. Breadth of representation of applicant group.

Highly representative.....3 points.

Moderately representative.....2 points.

Minimally representative.....1 point.

Not representative.....0 points.

2. Demonstrated effectiveness of applicant group.

Highly effective.....3 points.

Moderately effective.....2 points.

Minimally effective.....1 point.

No demonstrated effectiveness.....0 points.

3. Demonstrated effort of applicant group to identify and address the full range of concerns of individuals affected by the identified disposal site.

Excellent effort.....3 points.
Moderate effort.....2 points.
Minimal effort.....1 point.
No demonstrated effort.....0 points.

(b) Need for Proposed Project and Anticipated Benefit (maximum - 15 points).

1. Complexity and severity of the disposal site.

Highly complex and severe.....3 points.
Moderately complex and severe.....2 points.
Minimally complex and severe.....1 point.
Not complex and severe.....1 point.

2. Impact of disposal site on public health and the environment.

High impact.....3 points.
Moderate impact.....2 points.
Minimal impact.....1 point.
No impact.....0 points.

3. Extent to which project results or products will be disseminated to a responsive audience of affected individuals.

High.....3 points.
Moderate.....2 points.
Minimal.....1 point.
Unacceptable.....0 points.

4. Potential of proposed activities to enhance public participation in response planning decisions at the identified disposal site.

High potential.....3 points.
Moderate potential.....2 points.
Minimal potential.....1 point.
No potential.....0 points.

5. Relationship of proposed activities to the environmental, health and economic impacts of the disposal site.

Excellent relationship.....3 points.
Good relationship.....2 points.
Fair relationship.....1 point.
Unacceptable unrelated.....0 points.

(c) Overall Quality of Applicant Group's Proposal (maximum - 15 points).

1. Completeness of description of proposed activities.
Very complete.....3 points.
Moderately complete.....2 points.
Minimally complete.....1 point.
Unacceptably incomplete.....0 points.
2. Effectiveness of proposed activities in addressing identified issues and accomplishing overall project goals.
Very effective.....3 points.
Moderately effective.....2 points.
Minimally effective.....1 point.
Ineffective.....0 points.
3. Feasibility of completing proposed project with proposed work schedule.
Highly feasible.....3 points.
Moderately feasible.....2 points.
Minimally feasible.....1 point.
Not feasible.....0 points.
4. Qualifications of consultants to be employed by applicant group.
Highly qualified.....3 points.
Moderately qualified.....2 points.
Minimally qualified.....1 point.
Not qualified.....0 points.
5. Presence of identifiable goals and/or products as part of proposed project.
Strong presence.....3 points.
Moderate presence.....2 points.
Minimal presence.....1 point.
Lack of presence.....0 points.

(2) Grant Funding Priority List

The Department shall rate each application certified as complete according to the criteria set forth in 310 CMR 40.708(1) and shall establish a grant funding priority list which shall include a fundable and an extended portion. The fundable portion of said list shall include those applications ranked in order of points from highest to lowest which are expected to be awarded grants for that funding round. The extended portion of said list shall include the remaining applications ranked in order of points from highest to lowest. In the event that the Department must choose between two applications having the same point

value, the Department shall select the application having the earliest date of submission of the Part I section of the application form. The Department will determine the number of grants it will distribute based on the following considerations:

- a. the Department's administrative capacity at the time the grant funding list is established;
- b. the total amount of funding available for the grant program in a given year; and
- c. the total number of certified grant applications in a given funding round.

(4) Grant Review Committee

The Department shall appoint a Grant Review Committee which shall review the Department's grant funding priority list prior to its being released to the public. The Committee shall also review all completed applications received by the Department for that funding round. The Committee shall determine the degree to which the Department has made its decisions in accordance with the evaluation criteria specified in 310 CMR 40.708(1). Based upon its review, the Committee shall submit a written determination to the Department indicating whether or not the Department's grant funding priority list adequately reflects said criteria and stating the reasons for said determination. The Department reserves the right to revise said grant funding priority list based on the information received from the Committee.

The Committee shall consist of five members chosen from a larger pool of individuals appointed from the public. If any individual's relationship to or interest in a disposal site which is the subject of a grant application which is being reviewed by the Committee would pose an actual or potential conflict of interest, then said individual shall not be appointed to the Grant Review Committee for said funding round.

(5) Notification of Grant Awards

Upon final determination of the Department's grant funding priority list the Department shall publish said list in the MEPA Monitor and shall mail a copy to the contact person for each applicant group whose name appears on said grant funding priority list.

(6) Effect of Listing

Any applicant group on the fundable portion of the grant funding priority list may be bypassed for an award if the Department determines that said applicant group is for any reason unable to accept or receive said grant during that funding round. Any applications that are bypassed shall not retain their rela-

tive priority rating for future funding rounds. Applications bypassed on the fundable portion of the grant funding priority list shall be replaced by the highest ranked applications on the extended portion of said list. Each grant funding priority list shall be in effect only during the funding round in which it was established.

(7) Awarding of Grants

A grant shall be deemed awarded when the grant agreement is executed by the Department and the grantee. The grant agreement shall consist of the grant offer as executed by the Department and the grant acceptance as executed by the grantee as well as any and all terms and conditions under which the grant is being awarded to the grantee.

40.709 Payment Method

All payments shall be made subject to such conditions as are imposed by or pursuant to these regulations. Payment of the grant award to the grantee shall be made as reimbursements for costs incurred by the grantee. The terms and conditions of payment and all required supporting documentation to be submitted by grantee prior to payment shall be set forth in the grant agreement between the Department and the grantee.

40.710 Fiscal Management of Grants

(1) The grantee is responsible for complying with these regulations and the terms and conditions contained in the grant agreement between the grantee and the Department. This responsibility may be neither delegated nor transferred by the grantee.

(2) The grantee must establish for its project a separate account in a bank with insurance coverage by the Federal Deposit Insurance Corporation (FDIC). Project funds from all sources and any interest earned on such funds must be credited to said account and all project payments must be made from said account.

(3) The grantee must maintain a financial management system which provides for effective control over and accountability for all project funds. Grantees shall safeguard all such funds and ensure that they are used solely for the project.

40.711 Records to be Maintained by Grantees

(1) The grantee shall maintain books, records, documents, and supporting evidence which shall fully explain the source, amount, and disposition of all funds used for the project.

(2) The grantee shall require its contractors, including contractors for professional services, to also maintain books, documents, papers, and records which are pertinent to the project.

(3) The grantee and contractors of the grantee shall retain all records for a period of at least three years from the date of the final grant payment.

(4) The grantee and its contractors shall make records available to the Department at all reasonable times for inspection, copying, and auditing.

(5) The grantee and its contractors shall retain all records relating to disputes until all appeals, litigation, claims, or exceptions arising out of the grantee's project have been fully resolved.

40.712 Inspection of Projects

The Department may, at any reasonable time, conduct inspection at any location where a grantee's project is being carried out.

40.713 Honest Practices

(1) The award and administration of grants, and of subagreements awarded by grantees pursuant to these grants, shall be accomplished free from bribery, graft, kickbacks and other corrupt practices. The grantee bears the primary responsibility for the prevention, detection and cooperation in the prosecution of any such conduct. State administrative or other legally available remedies will be pursued however, to the extent appropriate.

(2) The grantee must effectively pursue available state or local administrative remedies, and take appropriate remedial action, with respect to any allegations or evidence of such illegality or corrupt practices which are brought to its attention. The grantee must advise the Department immediately when such allegation or evidence comes to its attention, and must periodically advise the Department of the status and ultimate disposition of any matter, including those referred pursuant to subsection (4) of this section.

(3) The Department may suspend or terminate grant payments or may revoke a grant at any time if the Department becomes aware of any allegations, evidence or appearance of illegality, corruption, or fraud associated with the award of the grant, compliance or noncompliance with these regulations of the grant agreement between the Department and the grantee, or expenditure of funds for the project. In the event that a grant is revoked, the grantee shall be responsible for returning to the Commonwealth all funds received by the grantee pursuant to the grant.



Commonwealth of Massachusetts Department of Environmental Quality Engineering

Potential Oil/Hazardous Material Release Site PRELIMINARY ASSESSMENT REPORT

For DEQE Use Only

Case No. _____

File Name _____

Date Listed _____

Disposition _____

I. PROPERTY NAME AND LOCATION (See Supplementary Instructions)

Property Name ¹ _____

Address _____

Municipality ² _____

Zip Code _____

USGS Quad(s) ⁴ _____

UTM Coordinates ³

N _____ M

E _____ M

Latitude/Longitude

____ _ N

____ _ W

II. OWNERS/OPERATORS

Present Owner: ⁵

Address: _____

Contact _____

Tel. _____

Date
Acquired _____

Specific Property Use/Activity ⁶

SIC # _____ ☐ Active ☐ Inactive

Present Operator:

Address: _____

Contact _____

Tel. _____

Date
Started _____

Specific Property Use/Activity

SIC # _____ ☐ Active ☐ Inactive

Previous Owner:

Address: _____

Tel. _____

From/To
Dates _____

Specific Property Use/Activity

SIC # _____

Previous Operator:

Address: _____

Tel. _____

From/To
Dates _____

Specific Property Use/Activity

SIC # _____

Additional Owner/Operator Information is: ☐ Attached ☐ Unknown ☐ Not Pertinent

III. GENERAL PROPERTY/AREA INFORMATION

Site Locus Map Attached ⁷ ☐

Property/Area Use ⁸ Property Present Property Past Surrounding Area

Industrial _____

Commercial _____

Residential _____

Agricultural _____

Undeveloped _____

Check if property is or ever was a known:

☐ Refuse/Waste Disposal Area

☐ Gasoline (Service) Station

☐ Fuel Storage Depot

☐ Industrial Manufacturing Facility

☐ Check if Property is Planned for Development

IV. REVIEW OF AVAILABLE RECORDS/INFORMATION

Municipal: Date Reviewed _____ By _____ Of _____

Information Source(s): _____

Contact Person(s): _____ Telephone: _____

State: ⁹ Date Reviewed _____ By _____ Of _____

Information Source(s): _____

Contact Person(s): _____ Telephone: _____

Owner/Operator: ¹⁰ Date Reviewed _____ By _____ Of _____

Information Source(s): _____

Contact Person(s): _____ Telephone: _____

Other: ¹¹ Date Reviewed _____ By _____ Of _____

Information Source(s): _____

Contact Person(s): _____ Telephone: _____

Additional Information/Information Sources are attached: ☐ Yes ☐ No.

IV. SURVEY OF AVAILABLE RECORDS/INFORMATION (Continued.)

Based upon records and available information, have petroleum products or hazardous materials been used, treated, stored, or disposed of, on the property?

☐ Yes ☐ No ☐ Petroleum ☐ Hazardous Materials

Underground Storage Tanks: ¹² Records/Evidence of Present/Former Use: ☐ Yes ☐ No

| Indicate Number of Tanks: | Gasoline | Fuel Oil | Waste/Other Oil | Hazardous Materials | Unknown |
|----------------------------|----------|----------|-----------------|---------------------|---------|
| Presently On-site | _____ | _____ | _____ | _____ | _____ |
| Removed | _____ | _____ | _____ | _____ | _____ |
| With Capacity 1100 Gallons | _____ | _____ | _____ | _____ | _____ |
| Over 10 Years Old | _____ | _____ | _____ | _____ | _____ |
| Total Number: | _____ | _____ | _____ | _____ | _____ |

Wastewater: ¹³ Generated? ☐ Yes ☐ No ☐ Unknown Composition ☐ Sanitary ☐ Industrial Disposal ☐ Municipal Sewer ☐ On-site ☐ Other

Present ☐ Yes ☐ No ☐ Unknown Sanitary ☐ Sanitary ☐ Industrial Municipal Sewer ☐ Municipal Sewer ☐ On-site ☐ Other

Past ☐ Yes ☐ No ☐ Unknown Sanitary ☐ Sanitary ☐ Industrial Municipal Sewer ☐ Municipal Sewer ☐ On-site ☐ Other

Comments: _____

Is there currently an on-site water supply well? ☐ Yes ☐ No ☐ Unknown. Active? ☐ Yes ☐ No.

Other existing means for sampling groundwater? ☐ Yes ☐ No

Indicate Present or Past Federal/State Environmental Permits/Regulations at the Property.

☐ N.P.D.E.S. ☐ Groundwater Discharge ☐ R.C.R.A. Generator ☐ R.C.R.A. TSD ☐ Air Quality ☐ Other

Comments: _____

Is/are there any record(s) of Criminal, Civil, or Administrative Actions, at the property due to (alleged) violations of environmental statute or regulation? ☐ Yes ☐ No Comments: _____

V. PROPERTY RECONNAISSANCE

Property Reconnaissance by Owner/Operator/Consultant ¹⁴ (Circle one.)

Date _____ By _____ Of _____

Evidence of a Release of Oil or Hazardous Materials? ☐ Yes ☐ No ☐ Potential

If Yes/Potential, Based upon: ☐ visual ☐ olfactory ☐ analytical/screening

Comments: _____

FOR DEQE USE ONLY:

_____ On-site Reconnaissance _____ Off-site Reconnaissance By EPA/DEQE/Contractor: (Circle one.)

Date _____ By _____ Of _____

Evidence of a Release of Oil or Hazardous Materials? ☐ Yes ☐ No ☐ Potential

Comments: _____

VI. PRELIMINARY ASSESSMENT SUMMARY/REPORTING MATRIX

Based upon a review and evaluation of available records, information, and field observations, indicate and summarize applicable property conditions. Abbreviations and table headings are explained at the bottom of the page; additional guidance is contained in direction section. **Please note that responses are mandatory in shaded columns.**

| SOURCE | Past/Present Existence ¹⁶ | | Test Data Available ¹⁶ | | Evidence of OHM Contamination/Release ¹⁷ | | | COMMENTS ¹⁸ | |
|--|--------------------------------------|--------------------------|-----------------------------------|--------------------------|---|--------------|--|--------------------------|------|
| | Yes | No | Information Source (f) | Yes | No | Describe (g) | Rec. Obs. Test | | None |
| On-Site (Non-Liquid) Waste Disposal (a) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Surficial OHM Discharge or Spillage | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Surficial Wastewater Discharge (b) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Subsurface OHM Discharge (c) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Subsurface Wastewater Discharge (d) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Underground Storage Tank(s) - Oil - (e) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Underground Storage Tank(s) - Haz. Materials - | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Above-Ground Oil/Haz. Material Storage Tank(s) | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Other: | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |
| Unknown Source but Evidence of Contamination | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> | |

FOOTNOTES: (a) Includes refuse, demolition wastes, sludges, hazardous wastes; (b) Includes domestic or industrial sewage, surface impoundments; (c) via dry wells, leach fields, injection wells, etc.; (d) includes domestic or industrial sewage leach fields / pits; (e) note: waste oil is considered a "hazardous material"; (f) records, field observation, etc.; (g) Includes tank testing data, geophysical data, analytical data, etc.

ABBREVIATIONS: Rec = Records; Obs = Observations; OHM = Oil or Hazardous Material

ADDITIONAL COMMENTS: ¹⁹

| | | | | | | | |
|--------------------------------|-------------------------------------|---------------------------------------|---|---------------------|----------------------------------|---------------------------------------|-----------------------------------|
| Property Access: ²⁰ | <input type="checkbox"/> Restricted | <input type="checkbox"/> Unrestricted | <input type="checkbox"/> Partially Restricted | Property Ownership: | <input type="checkbox"/> Private | <input type="checkbox"/> Governmental | <input type="checkbox"/> Military |
|--------------------------------|-------------------------------------|---------------------------------------|---|---------------------|----------------------------------|---------------------------------------|-----------------------------------|

VII. CONCLUSIONS AND CERTIFICATIONS

Based upon all available information and data, pursuant to MGL Chapter 21E, is there evidence that a release of oil or hazardous materials has or is occurring at the property? ☐ Yes ☐ No ☐ Unknown at this time

Do property conditions constitute a threat of release? ☐ Yes ☐ No ☐ Potential

If either of above is "Yes", are immediate site actions necessary to abate an imminent hazard to public health, safety, welfare, or the environment, due to:

| | | |
|---|------------------------------|-----------------------------|
| <input type="checkbox"/> Proximity to known potable water supplies? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Potential for direct human contact and exposure? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Potential for fire or explosion? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Proximity to fisheries/critical habitats? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Other: _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

If a release has been confirmed, are immediate actions necessary to initiate abatement, containment, or recovery actions, in order to avoid a situation where a delay in remedial actions will substantially decrease the efficiency and/or degree of ultimate cleanup?

☐ Yes ☐ No

Have remedial actions already been taken at the site?

☐ Yes ☐ No

NOTE: If immediate actions are needed, or if remedial actions have already been taken at the site, append complete details on nature of problem and proposed/completed site actions.

Owner/Operator/Private Party (Circle one.)

Professional Environmental Consultant

Name _____

Name _____

Title _____

Title _____

Company _____

Firm _____

Date _____

Date _____

Property Affiliation _____

☐ Additional Information attached to Form

Indicate Name(s) of Environmental Assessment Report(s) prepared for Property: _____

If Form completed by Private Party and/or Professional Environmental Consultant, please sign:

I hereby certify that the information furnished in and with this Form, to the best of my knowledge, is true, accurate, and complete.

Signature: _____
(Owner/Operator/Private Party)

Signature: _____
(Consultant)

VIII. DISPOSITION OF CASE

FOR DEQE USE ONLY:

Form completed by: PRP/Consultant/DEQE/DEQE Contractor/Other (Circle one.) Date Received: _____

If not compiled by DEQE, is provided information: ☐ Adequate ☐ Insufficient ☐ Inaccurate

Conclusions: ☐ No Evidence of Release ☐ Release Confirmed ☐ Potential Release - Further Investigation Required

Disposition of Case: ☐ No Action ☐ Re-do P.A. ☐ Perform S.I. ☐ Perform IRM ☐ Other

Enforcement Position: ☐ N.A. ☐ Send N.O.R. ☐ N.O.R. sent _____ ☐ Other

Comments: _____

DEQE STAFF: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

ACME
BOOKBINDING CO., INC.

NOV 8 1988

100 CAMBRIDGE STREET
CHARLESTOWN, MASS

